Vance C. Smith, Jr., Commissioner

GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1000

July 22, 2010

Mr. Rodney N. Barry, P.E.
Division Administrator
Federal Highway Administration
Atlanta Federal Center
61 Forsyth Street, S.W.
Suite 17 T100
Atlanta, Georgia 30303-3104

ATTN: Jennifer Giersch

Dear Mr. Barry:

Re: Project STP00-0164-01(029), Clayton & Fayette Counties, P.I. No. 721440 – State Route 54 Widening from McDonough Road in Fayette County to US 19/41/SR 3/Tara Boulevard in Clayton County

Enclosed are two copies of the Draft Environmental Assessment (DEA) with regular Section 4(f) evaluation for the above noted project. This statement is being forwarded to you for your review. This project currently has a GDOT management schedule of June 2011 right-of-way authorization.

The original noise/air noise findings from 1997 have been incorporated in this DEA with a commitment to update them in the final EA. The process to update the noise and air studies is underway. To date, no noise abatement has been proposed due to access breaks, and no effects changes are anticipated as a result of this study. The noise studies will be updated from STAMINA to TNM 2.5. Carbon monoxide levels were below three parts per million and are expected to be consistent with federal air quality goals.

We would appreciate your comments, if any, by August 23, 2010. If you have any questions, please contact Funmi Adesesan at (404) 631-1190.

Sincerely,

Glenn Bowman, PE

Glenn Bowman, P.E.
State Environmental Administrator

GB/fa
Enclosures

cc: Ernay Robinson, Georgia DOT Project Manager (w/o attachment)
Keisha Jackson, Title VI Liaison (w/o attachment)

ENVIRONMENTAL COMMITMENTS TABLE

Project Information

Project No.: STP00-0164-01(029)
County : Clayton and Fayette
PI No.: 721440
Status: EA
Date Updated: July 22, 2010

Project Manager Review

☒ I have reviewed these commitments and verified their feasibility.
☒ All delineations are marked on the plans.

Clay C. Bartleson — PM Signature
7-22-2010 — Date

Specialist Review

Air/Noise	AP approved 7/22/10
Archaeology	PB approved 7/16/10
Ecology/404	DC approved 7/14/10
History	MW approved 7/14/10
NEPA	FA approved 7/22/10

NO.	COMMITMENT/REQUIREMENT *(Separate out commitments by PI No.)*	DOCUMENT STIPULATED IN	RESPONSIBLE PARTY	ESTIMATED COST*	PLACE ON PLANS *(Yes or No)*	REQUIRES A SPECIAL PROVISION *(Yes or No)*	STATUS *(Pre- and Post Construction – Complete or Incomplete; During Construction - Signature Required)*
Pre-Construction Commitments							
1	Historic resource boundaries would be delineated on plans.	Memo to design dated August 23, 2007	Office of Road Design	N/A	Yes	No	Complete
2	The FHWA will ensure that a historical narrative detailing the history of the Mundy House and the association of the Mundy family to nearby landmarks, such as Mundy Mill Road will be prepared. The documentation will be submitted to the Georgia SHPO for acceptance and retention, and will also be provided to local libraries and historical societies for their repositories.	Assessment of Effects (AOE) & MOA	Office of Environmental Services	N/A	No	No	Incomplete
3	Prior to project implementation, FHWA will ensure that the setting within and outside the eligible National Register boundary of the Mundy House will be documented with medium format photography. The documentation (photography, narrative, and landscaping) will be prepared per the guidelines set forth in the GDOT and Georgia SHPO's Guidelines for Establishing a Permanent Archival Record. The documentation will be submitted to the Georgia SHPO for acceptance and	Assessment of Effects (AOE) & MOA	Office of Environmental Services	N/A	No	No	Incomplete

*Estimated Cost for planning purposes only; in current dollars as of Date Updated

NO.	COMMITMENT/REQUIREMENT *(Separate out commitments by PI No.)*	DOCUMENT STIPULATED IN	RESPONSIBLE PARTY	ESTIMATED COST	PLACE ON PLANS *(Yes or No)*	REQUIRES A SPECIAL PROVISION *(Yes or No)*	STATUS *(Pre- and Post Construction – Complete or Incomplete; During Construction - Signature Required)*
	retention.						
4	Prior to project implementation, FHWA will ensure that the property owner of the Mundy House is contacted and afforded the opportunity to have a landscape plan developed on his/her property. The landscape plan will consist of a landscape treatment utilizing native vegetation in order to create a buffer between the Mundy House and the improved roadway. The plan developed between the property owner and GDOT would be submitted to the Georgia SHPO for review and concurrence.	Assessment of Effects (AOE) & MOA	Office of Environmental Services	N/A	Yes	No	Incomplete
5	Delineate UST & hazardous material sites on plans.	1997 EA/FONSI	Office of Road Design	N/A	Yes	No	Incomplete
6	Wetlands, streams, and stream buffers will be delineated on plans. Wetlands will be noted as Environmentally Sensitive Areas (ESA).	2010 Ecology Addendum	Office of Road Design	N/A	Yes	No	Complete
7	There are 96 feet of stream impacts and 2.761 acres of wetland/ephemeral channel impacts. Approximately 264 stream credits & 20 wetland credits will be required for mitigation.	2008 Ecology Report and 2010 Ecology Addendum	Office of Program Delivery	$26,400 stream credits $148,000 wetland credits	No	No	Incomplete
8	Special Provision 107.23G required for effects to high scale shinier	2008 Ecology Report and 2010 Ecology Addendum	Office of Environmental Services	N/A	No	Yes	Complete
9	A 404 permit - NW 14/PCN - will be applied for and received prior to project implementation	2008 Ecology Report and 2010 Ecology Addendum	Office of Environmental Services	N/A	No	No	Incomplete
10	A stream buffer variance would be required for impacts to the 25-foot buffer of Pond 9.	2010 Ecology Addendum	Office of Environmental Services	N/A	Yes	No	Incomplete

*Estimated Cost for planning purposes only; in current dollars as of Date Updated

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11	The contractor shall ensure that no construction related activities other than those shown on the approved plans, including the use of easements, staging, construction, vehicular use, borrow or waste activities, and trailer placement occur within the eligible National Register resource boundaries.	October 22, 2009 memo to Bryant Poole	Office of Environmental Serives	N/A	Yes	No	Transmittal has been complete. During construction comment has been added.
12	A No-Rise certification is required for an encroachment of the regulatory floodway associated with Morning Creek, Camp Creek, and the Flint River.	EA	Office of Bridge Design	N/A	No	No	Incomplete
13	The Noise Study will be updated from Stamina to TNM 2.5.	EA	Office of Environmental Services	NA	No	No	Incomplete
14	The Air Study will be updated with current traffic information.	EA	Office of Environmental Services	NA	No	No	Incomplete

During Construction Commitments

Construction or Area Engineer signature required upon the completion of all During Construction Commitments.

15	A Notice of Intent (NOI) to the NPDES General Permit will be submitted prior to construction. The construction contractor, following the award of the contract, but prior to the start of construction, shall acquire the permit.	EA	Office of Bidding Administration/ Construction Contractor	N/A	No	No	Construction or Area Engineer signature required: _____
16	For the UST system that is to be acquired, if contamination is discovered during closure, the removal of toxic or hazardous material will be coordinated with the Environmental Protection Division and applicable laws and regulations will be followed	UST Report	Office of Program Delivery	N/A	Yes	No	Construction or Area Engineer signature required: _____

*Estimated Cost for planning purposes only; in current dollars as of Date Updated

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17	The contractor shall ensure that no construction related activities other than those shown on the approved plans, including the use of easements, staging, construction, vehicular use, borrow or waste activities, and trailer placement occur within the eligible National Register resource boundaries.	October 22, 2009 memo to Bryant Poole	Office of Environmental Serives	N/A	Yes	No	Construction or Area Engineer signature required: _____

Post Construction Commitments

	None						

Total Estimated Cost* for all Project Commitments: $174, 400

*Estimated Cost for planning purposes only; in current dollars as of Date Updated

Date: July 12, 2010

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

SPECIAL PROVISION

PROJECT STP00-0164-01(029), FAYETTE & CLAYTON COUNTIES, P.I. 721440

Section 107 – Legal Regulations and Responsibility to the Public

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Add the following to Subsection 107.23:

G. Protection of Environmentally Sensitive Species

The following conditions are intended as a minimum to protect the highscale shiner (*Notropis hypsilepis*) and its habitat during any construction activities at State Route 54 over Morning Creek, Camp Creek, and the Flint River. The species has been documented onsite in Camp Creek. The highscale shiner is listed in the State of Georgia as threatened and is protected under the Georgia Endangered Wildlife Act of 1973.

1. The Contractor shall advise all project personnel employed to work on this project about the potential presence and appearance of the highscale shiner and that that there are civil and criminal penalties for harming, harassing, or killing this protected species. Pictures and habitat information will be provided to the Contractor at the preconstruction conference.

2. At any time, concrete debris, paving materials, litter, bridge falsework, demolition debris or any other materials shall not be allowed to fall or be placed into any of the above named streams. In addition, the Contractor shall ensure that no work shall take place within Camp Creek from March 1st through June 30th due to the spawning season of the highscale shiner.

3. In the event any incident occurs that causes harm to or that could be detrimental to the continued existence of the highscale shiner within the project area, the Contractor shall report the incident immediately to the Project Engineer who in turn will notify Glenn Bowman, P.E., State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at (404) 631-1101. In addition, all activity shall cease pending consultation by the Department with the Georgia Department of Natural Resources.

4. Following project completion, a report summarizing any incidents with protected species shall be submitted by the Contractor to the:
   a. the Project Engineer;
   b. U.S. Fish and Wildlife Service, Westpark Center, Suite D, 105 Westpark Drive, Athens, GA 30606;
   c. Federal Highway Administration, 61 Forsyth Street, S.W., Suite 17T100, Atlanta, Georgia 30303-3104;
   d. Georgia Department of Natural Resources, Nongame Wildlife and Natural Heritage Section, Wildlife Resources Conservation Center, 2065 U.S. Highway 278 Southeast, Social Circle, Georgia 30025; and
   e. Glenn Bowman, P.E., State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services, 600 West Peachtree St, Atlanta, GA 30308.

5. All costs pertaining to any requirement contained herein shall be included in the overall bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

PROJECT STP00-0164-01(029)

CLAYTON/FAYETTE COUNTIES

P.I. NUMBER 721440

The proposed project, approximately 5.3 miles in length, consists of widening SR 54 from two to four lanes from just north of McDonough Road in Fayette County to US 19/41/SR 3/Tara Boulevard in Clayton County. GDOT bridges 113-5052(over Morning Creek), 113-5053(over Camp Creek), and 063-5046(over the Flint River), which were replaced in 2000, would also be widened as part of the proposed project.

ENVIRONMENTAL ASSESSMENT

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

GEORGIA DEPARTMENT OF TRANSPORTATION

SUBMITTED PURSUANT TO 42 USC 4321 et. seq.

And 49 USC 303

Alexesan 7/22/10

NEPA DATE

Glenn Bowman, P.E./CW 7/22/10

GLENN BOWMAN, P.E. DATE
STATE ENVIRONMENTAL
ADMINISTRATOR

APPROVAL FOR ADVANCEMENT TO AVAILABILITY/PUBLIC HEARING PHASE

DATE

FOR: RODNEY N. BARRY, P.E.
DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION

****

NEPA DATE

GLENN BOWMAN, P.E. DATE
STATE ENVIRONMENTAL
ADMINISTRATOR

APPROVAL OF ENVIRONMENTAL ASSESSMENT

DATE

FOR: RODNEY N. BARRY, P.E.
DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION

APPENDICES

LIST OF FIGURES

LIST OF TABLES

I. NEED AND PURPOSE

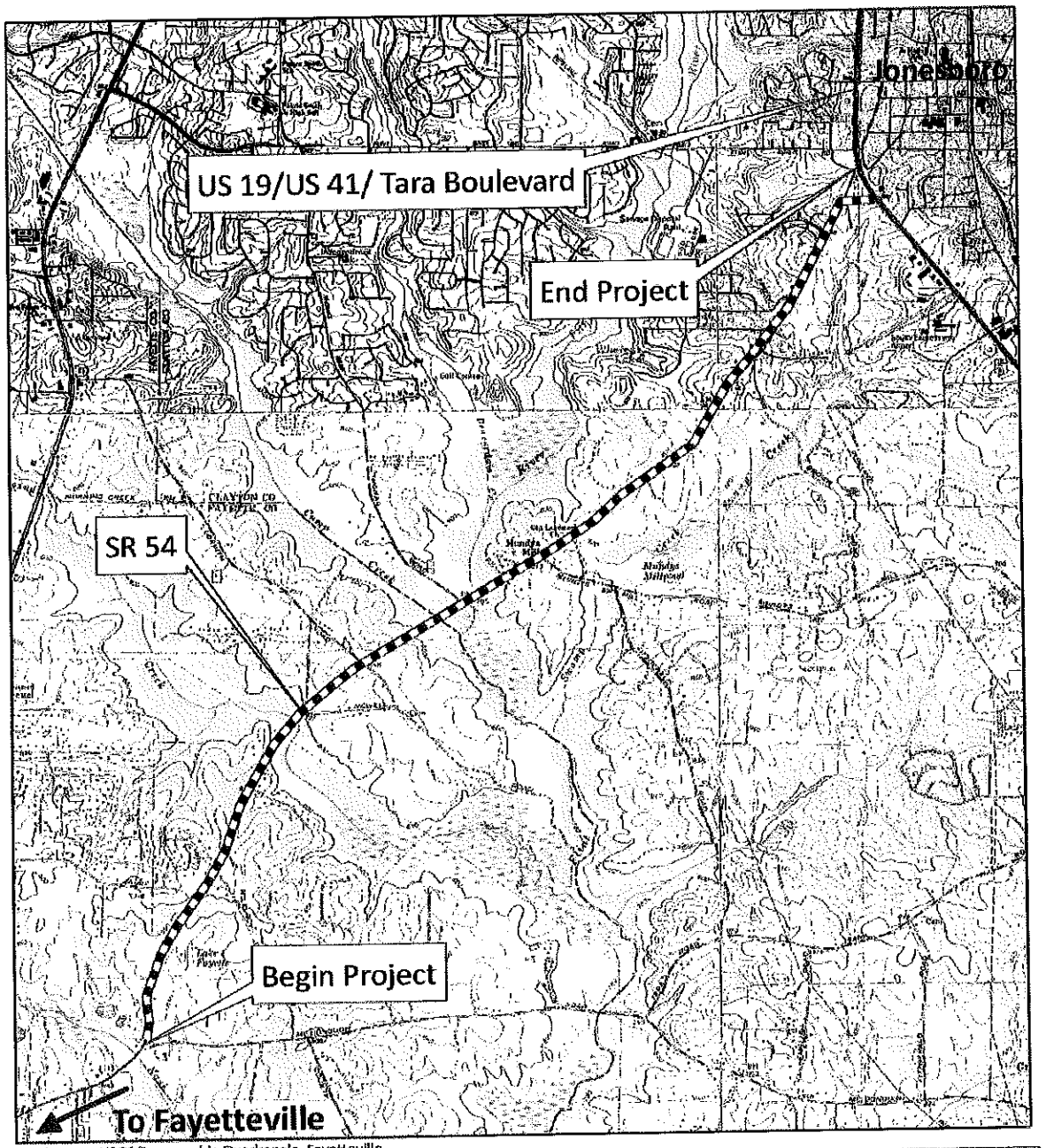
A. Introduction

Project STP00-0164-01(029) in Clayton and Fayette Counties consists of the widening from two to four lanes of 5.3 miles of State Route 54 from just north of McDonough Road in Fayette County to US 19/41/SR 3/Tara Boulevard in Clayton County. Although the actual widening is proposed to be 5.3 miles, actual improvements or overlay at termini intersections would lengthen the project slightly. The project begins at McDonough Road (Mile Log (ML) 12.81) in Fayette County, follows existing SR 54 east to the Clayton County line (Fayette ML 15.36, Clayton ML 0.00), and continues east following existing SR 54 to US 19/41/SR 3/Tara Boulevard (ML 2.94). The project length is 2.55 miles in Fayette County, and 2.94 miles in Clayton County, for a total length of 5.49 miles. The last 0.43 mile would be a slight relocation due to substandard horizontal curves. In addition, the proposed project would widen Georgia Department of Transportation (GDOT) bridges 113-5052, 113-5053, and 063-5046 over Morning Creek, Camp Creek, and the Flint River. These bridges were replaced in 2000 by project BRF00-0164-01(018) but would now need to be widened. The proposed bridges would be approximately 38-foot by 240-foot over Morning Creek, 38-foot by 160-foot bridge over Camp Creek, and 38-foot by 240-foot bridge over the Flint River.

This proposed improvement is located within the boundaries of the Atlanta Regional Commission (ARC) and is found in the ARC's Regional Transportation Plan listed as ARC No. CL-041. This project was originally programmed in October 1989. It is now programmed for fiscal year (FY) 2011 ROW fund authorization and FY 2013 construction. Except in specific areas where adjustments were made to avoid impacts to eligible historic resources, the proposed widening would consist of an urban four-lane section (12-foot lanes) with a 24-foot raised median, 4-foot bike lanes in each direction and 16-foot shoulders throughout the project. In order to minimize impacts to a historic resource (the Mundy House), around the areas of station numbers 278+32 to 284+84, the typical section in that area was changed to four 11-foot lanes, 4-foot bike lanes, 5-foot sidewalk, a 14-foot flush median and a wall (refer to Figure 2 for station

number locations). The wall would minimize the impact on the Mundy House property and would also allow for it to retain its defining characteristics. This alternative would acquire 0.18 acre of right-of-way (ROW) from the resource. The driveway easement would extend further into the property. In addition, there has been an alignment shift along SR 54 to avoid another historic resource, the A.J Mundy House, in the vicinity of station 251+45.64, which ties back into the existing alignment at station 279+06.18(refer to Figure 2). Turn lanes and median openings would be provided as necessary along the project corridor. The existing ROW along this portion of SR 54 is 80 feet. The total required ROW for project construction would vary to approximately 210 feet, except at the Flint River, where ROW would be approximately 255 feet.

Beginning at McDonough Road, the widening is mostly on the north and west side of the existing SR 54 up to a point south of Morning Creek. From Morning Creek to a point near Camp Creek, the widening occurs on both the north-west side and symmetrically across the bridge locations. From Camp Creek to a point near US 41, the widening occurs mostly on the southeast side (refer to Figure 1 for project vicinity layout). Just south of US 41, the proposed roadway is on new location to correct a deficient horizontal curve on its approach to US 41.


Jonesboro
US 19/US 41/ Tara Boulevard
End Project
SR 54
Begin Project
To Fayetteville
Source: USGS Topographic Quadrangle, Fayetteville
DEKALB
FULTON
CLAYTON
FAYETTE
HENRY
COWETA
SPALDING
Figure 1. Project Vicinity
Scale
0
0.5
1
1.5
2
Miles
STP-164-1(29)
Clayton/Fayette
PI 721440
SR 54 Widening
N

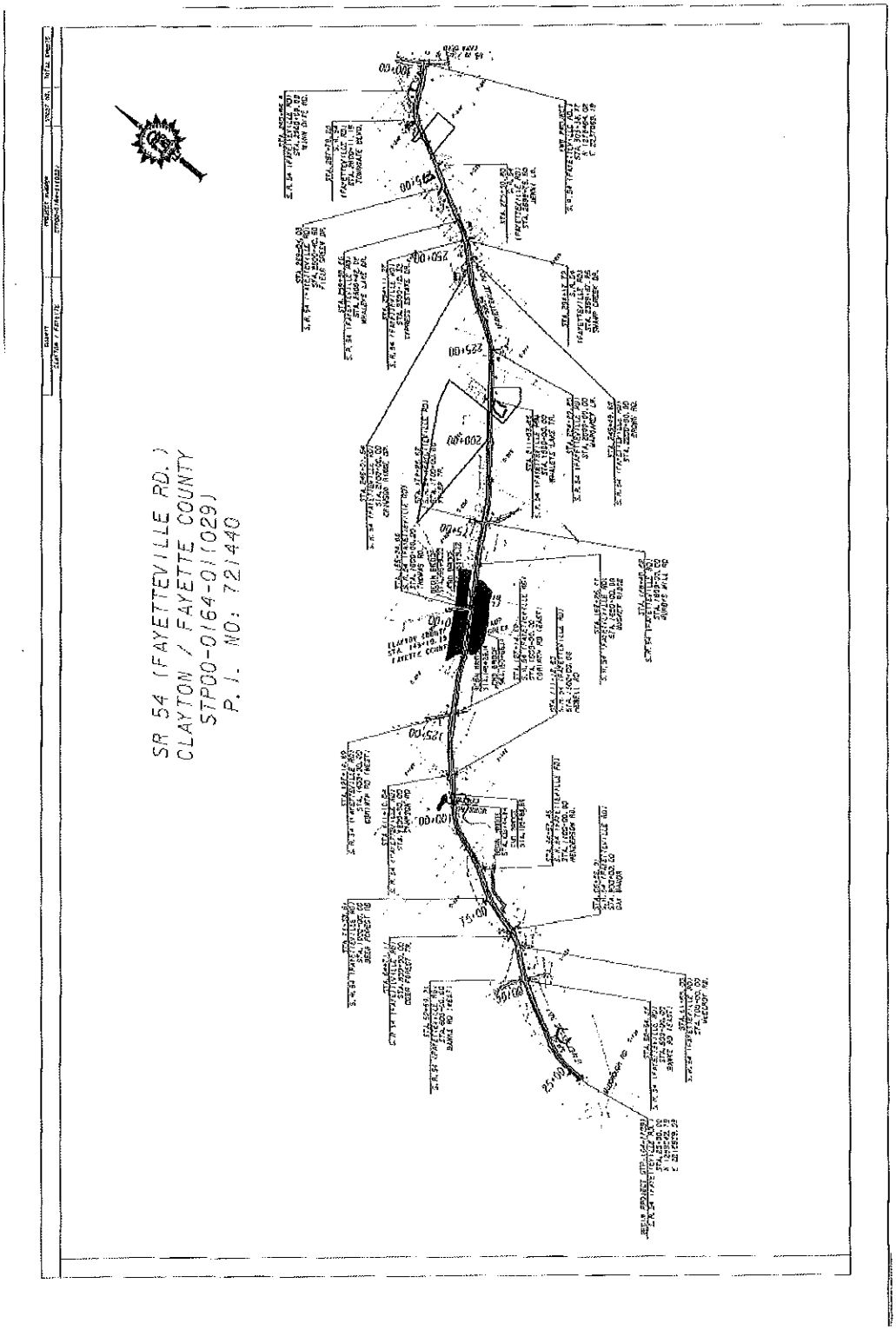


Figure 2 – Geometric Layout of Proposed Project Corridor

B. Planning Basis for the Action

According to the Clayton County Comprehensive Plan, population projections indicate that Clayton County would continue to grow through the end of the planning period in 2025, although at a slower rate than that which was experienced in the past two decades. Between 2005 and 2015 the county is projected to grow 13.45% and between 2015 and 2025* the county is anticipated to grow an additional 12.83%.

Table 1a: Clayton County Projected Population

Year	2005	2010	2015	2020	2025
Total	254,503	271,229	288,804	306,956	325,851

Source: Woods & Pool Economics, Inc.
* Information not available beyond 2025.

Clayton County is experiencing a fast population growth rate and increasing population density (Please refer to Tables 1a, 1b, and 1c). The 2000 Census reported 82,243 households in Clayton County. This represents a 25% increase in households in the county between 1990 and 2000 and a 61.74% increase since 1980. The average household size in the county decreased during the past 20 years from 2.96 in 1980 to 2.74 in 1990 and 2.84 in 2000. Although there was a decrease in average household size from the 80's to the 90's, this trend changed from the 90's to 2000, growing from an average of 2.74 to 2.84 persons respectively. This average household size is larger than the average for the state or the nation, 2.65 and 2.59 respectively in 2000. The increase in average household size in Clayton County is also contrary to the national and state trends of decreasing household sizes exhibited during the 1990 to 2000 period. Projections for household growth in the county show a gain of 13,551 additional households by 2010 and a total of 113,303 households in 2025 (see Table 1c).

Table 1b: Clayton County Households

	1980	1990	2000	% Change	% Change 90 - 00	Net Change
Households	50,850	65,523	82,243	61.74%	25.52%	16,720
Average Household Size	2.96	2.74	2.84	-4.05%	3.65%	N/A

Sources: Woods and Poole Economics, Inc. and Census

Table 1c: Projected Number of Households for Clayton County

Year	2000	2005	2010	2015	2020	2025
Total	82,662*	89,527	96,213	102,591	108,271	113,303

Source: Woods & Pool Economics, Inc. * Note, 2000 total households is an estimate and does not match the actual 2000 Census count.

According to its comprehensive plan, Fayette County has seen significant population growth over the last 20 years. Between 1980 and1990, the county grew by an average of 11.5% per year, adding 33,372 new residents. Between 1990 and 2000, the county averaged just under 5% per year, adding 28,848 new residents, for a 20-year total of 62,220 new residents. The county has seen a tremendous amount of growth in the last 20 years, both in the cities and the unincorporated area. Over this period, there has been a shift of population concentration from the unincorporated county to the cities. In 1980, 64% of the county's population lived in the unincorporated area. By 2000, just under half of the county's population lived in the unincorporated area (48%). Much of this growth, then, has occurred within the municipalities and particularly within the cities of Peachtree City and Fayetteville. Each city grew by over 300% in the last 20 years. Peachtree City experienced the greatest increase in population with an increase of 391%, adding a total of 25,151 new residents. Fayetteville grew by 311%, adding a total of 8,433 new residents. The growth in Peachtree City and Fayetteville represented just over half of Fayette County's growth (54 %) during the 20 year period. During the same 20-year period, Fayette County's growth far outpaced that of the Atlanta metropolitan area, the surrounding counties, and Georgia as a whole. Fayette County grew at a rate twice that of the Atlanta area (214% vs. 103%), and four times that of Georgia (214% vs. 50%). Fayette County's population continues to grow.

It can be inferred that if the expected developments in Clayton and Fayette counties typify what could be anticipated along SR 54, an increase in population and households would in turn result in an increase in traffic volumes as evidenced in the projected traffic volumes for the build and design years, 2013 and 2033 respectively. Also, as SR 54 is the major east-west connector between the two counties, it can be deduced that the expected population increase in both counties would produce additional traffic flow through SR 54 and result in the need for a widened roadway.

Projects in the Area

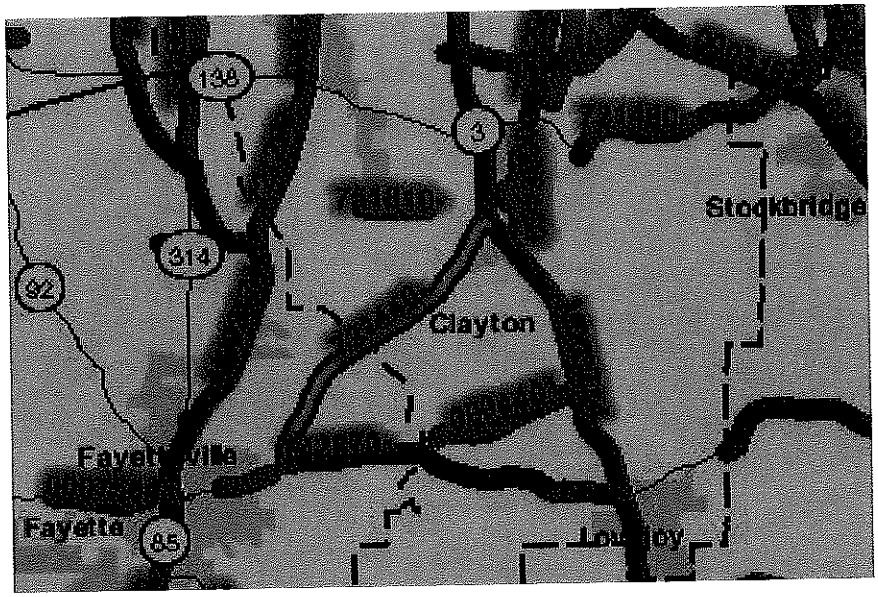


Figure 3 – Adjacent Projects

The proposed project is adjacent to or along the same corridor as several other projects (see Figure 3, Adjacent Projects Map):

- P.I. 751810, STP00-9107-00(002) – 1.64 miles of reconstruction, rehabilitation and widening from two to four lanes of County Road (CR) 1337/Flint River Rd from Glenwood Dr to Kendrick Rd in Clayton County with construction funds in FY 2013.
- P.I. 0007564, CSHPP-0007-00(564) – 2.27 miles of bicycle & pedestrian enhancement work along SR 54 in Fayetteville, Fayette County with construction fund authorization proposed for FY 2011.
- P.I. 0004401, MSL00-0004-00(401) – Locally sponsored project with an unspecified funding year for 2.53 miles of widening from two to three lanes, reconstruction & rehabilitation of CR 504/Tara Rd from SR 92/McDonough Rd TO Panhandle Rd in Clayton County.
- P.I. 742870, STP00-2009-00(004) – 5.78 of Road widening, reconstruction, and rehabilitation on SR 920 from SR 54 in Fayette County to SR 3/US 19 in Clayton County programmed for Long Range ROW and Construction funding.

- P.I. M003714, CSNHS-M003-00(714) – 11.72 miles of resurfacing and maintenance work on SR 3/US 19 from Henry County line to CR 1354/Old Dixie Way in Clayton County with construction funds authorized in FY 2008.

- P.I 721290, STP00-0074-02(021) - 4.0 miles of road widening, reconstruction, and rehabilitation on SR 85 from SR 279 in Fayette County to 6 lanes at Roberts Drive in Clayton County with ROW funds in FY 2018 and Construction funds in FY 2020.

- P.I. 0008440, CSSTP-0008-00(440) – Locally sponsored project with an unspecified funding year for 1.69 miles of Bicycle/Pedestrian Enhancements in downtown Jonesboro, Clayton County.

- P.I M003174, CSSTP-M003-00(174) – 4.62 miles of resurfacing and maintenance work on SR 85 from SR 92 in Fayette County to Clayton County line with construction funds authorized in FY 2005.

DEFICIENCIES IN THE SYSTEM

The current deficiencies in the system include a declining level-of-service (LOS) and above average accident and injury rates on SR 54/Fayetteville Road and side street intersections associated with increasing traffic volumes.

Location /Intersection of SR 54 &	Average Daily Traffic					Level-of-Service (LOS)				
	Current Year 2009	Build Year 2013		Design Year 2033		Current Year 2009	Build Year 2013		Design Year 2033	
		No Build 2 lanes	Build 4 lanes	No Build 2 lanes	Build 4 lanes	No Build	No Build	Build	No Build	Build
Entire Corridor -SR 54	18,920	20,920	21,280	34,320	34,860	E	E	B	F	C
Banks Road	8,960	10,040	10,020	16,520	16,420	B	B	A	E	C
Corinth Road	13,560	15,040	15,020	24,620	24,600	F	F	B	F	B
Mundy's Mill Road	12,120	13,420	13,400	22,020	21,960	B	C	B	F	D
Swamp Creek Drive	16,820	18,580	19,760	30,440	32,370	F	F	B	F	C

Table 2: Traffic and LOS Data

Operational Efficiency

Roadways are rated for operational effectiveness using LOS. There are six LOS, a standard means of classifying traffic conditions associated with various traffic volume levels and traffic flow conditions, at which a roadway can operate, represented by the letters "A" through "F." Each level is defined by a maximum value for the ratio of traffic volume (V) to facility capacity (C). A LOS of:

- A is when volume is well below capacity and traffic is flowing freely.
- B is when traffic flow is steady but the presence of other vehicles begins to be noticeable.

- C allows for steady traffic flow, but speeds and maneuverability are more closely controlled by the higher volumes.
- D is approaching an unsteady flow in which speed and maneuverability are severely restricted.
- E is when traffic flow is reduced to a slow but relatively uniform speed, and traffic volume is equal to or nearly equal to capacity and maneuverability is extremely difficult.
- F is when the volume greatly exceeds the capacity and lengthy delays occur.

According to Table 2, the 2009 LOS is an E along the corridor of SR 54 to be widened. In 2033, LOS would decline to F for the entire SR 54 corridor without improvements. However, after the proposed improvements, there would be instant results in the build year of 2013 with a LOS of B, and in the long run, based on traffic projections in 2033, a LOS of C. Banks Road, which is just north of the western terminus at McDonough Road, would have a LOS of E in 2033 if the project is not built even though it has a fairly good LOS rating of B in the existing road condition. Corinth Road, also in Fayette County and closer to the midpoint of the project corridor, currently has a LOS of F, but would have one of B in the design year if the project is built. The Mundy's Mill Road intersection with SR 54, in Clayton County and close to the midpoint of the project corridor, currently has a LOS of B, but it would deteriorate to a LOS of F in the design year if the project is not built. Swamp Creek Drive, also in Clayton County and close to the eastern terminus of the proposed project at Tara Blvd, has a current LOS of F which would be improved to a LOS of C in the design year if the project is built. Existing signalized intersections along the project corridor are at Banks Road, McElroy Road, Thomas Road, Mundy's Mill Road/Tyler Trail, and Tara Blvd (US19/41). Upon project implementation new signalized intersections would be added at Corinth Road, Station 199 + 50 (Mundy's Mill High School), and Brown Road.

Table 3 below, which analyzes the types of accidents at specific intersections along the project corridor, correlates to findings in the concept report analysis of 2003 traffic data. This analysis identified

locations within the project limits that had a high concentration of crashes as being intersections of side streets with SR 54 and having predominantly rear-end type crashes. Table 3 shows that at Thomas Road and McElroy Road, both signalized, more than 50% of the total number of crashes were rear-end accidents. It is interesting to note that these accidents are not for a lack of signalization at the intersections. The concept report also states that in analyzing 2003 accident data, when compared to the other hot spot intersections, those that have traffic signals have had higher numbers of crashes.

Intersection SR 54 &	Signalized	County	Mile log	Accidents 2006 - 2008				
				Rear-End	Angle	Not A Collision	Sideswipe	Total Number
Thomas Road	Yes	Clayton	0.10	26	10	5	1	42
Brown Road	No	Clayton	1.9	5	2	5	0	12
McElroy Road	Yes	Fayette	13.70	27	19	4	0	50
Corinth Road	No	Fayette	14.93	7	7	2	0	16

Table 3 – Types of Accidents at Specified Intersections for 2006 - 2008

Traffic projections indicate that future roadway demand would exceed existing carrying capacity. According to the Transportation Infrastructure Regional Study, a two lane roadway is built to accommodate traffic volumes of up to 2,800 vehicles per hour (about 1,400 per lane per hour). On the other hand, multiple lane roadways are designed and built to accommodate a capacity of 2,000 – 2,100 vehicles per lane per hour. Hence, a four lane roadway, like the proposed project, would be able to

accommodate a capacity ranging from 8,000 – 8,400 vehicles per hour. Table 4 shows existing and design year peak hour volumes in the vicinity of major intersections along SR 54 like Bank Road, Mundy's Mill Road, and Swamp Creek Drive. The table depicts the number of vehicles that drive through a specific location in one hour in each direction. The numbers reflected are for one lane in each direction. It is evident from the traffic data projections that the morning (AM) eastbound (EB) and evening (PM) westbound (WB) traffic numbers in the design year (2033) would exceed carrying capacity in a number of locations along the roadway if the proposed project is not built. Only in the area of Banks Road are the corresponding numbers substantially below the carrying capacity of 1400 vehicles per lane per hour. The Corinth Road AM EB count is closely approaching the maximum capacity. However, the design year traffic numbers shows no capacity issues along the entire corridor if the project is built (refer to traffic diagrams in Appendix C). The 2009 Average Annual Daily Traffic (AADT) for SR 54 (now two lanes) in the project area varies from 8,960 at the western project limits (McDonough Road) to 16,820 at the eastern terminus (Tara Blvd). In 2013, traffic is anticipated to increase to 10,040 AADT at the western limit and 18,580 AADT at the eastern project limit if the proposed project is not built. Design year (2033) traffic is projected to range from 16,520 AADT at the western limit to 30,440 AADT at the eastern limit if the project is not built. From 2009 to 2033, proposed traffic volumes represent an increase of 64% for this section of SR 54.

Area of Intersection with SR 54 &	Existing 2009 – 1 lane each direction				No Build 2033 – 1 lane each direction				Build 2033 – 2 lanes each direction; values shown are for a single (1) lane			
	AM		PM		AM		PM		AM		PM	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
Banks Road	375	530	580	445	680	995	1070	815	208	303	533	403

Hewell Road	465	810	920	590	850	1465	1670	1070	263	445	835	533
Corinth Rd	455	755	830	550	830	1370	1505	1000	255	418	750	500
Mundy's Mill Road	680	885	975	730	1235	1610	1765	1320	383	495	898	678
Swamp Creek Drive	520	945	960	545	950	1715	1740	985	313	548	898	520
Tara Blvd	530	965	980	550	960	1750	1770	1000	295	535	890	503

Table 4 – AM/PM Peak Hour Traffic Close to Major Intersections along SR 54; highlighted figures depict high traffic

Safety

The section of SR 54/Fayetteville Road, between mile post ML 0.0 – 2.94 in Clayton County and ML 12.78 - 15.36 in Fayette County, which encompasses the project limits, has an accident rate that has slightly increased over time. Approximately 616 crashes were reported and recorded from 2006 to 2008 along the proposed project corridor. Of the crashes reported and recorded from 2006 to 2008 along this road segment, 326 (53%) were "rear end" accidents, 129 (21%) were "angle" accidents, 100 (16%) were "not a collision with a motor vehicle," 47(8%) were "side-swipe" accidents, and 14 (2%) were "head-on" accidents. It is noteworthy that more than half the accidents were rear-end accidents which could be a factor of a capacity problem, among other possible causes, as vehicles follow each other too closely. Only 16% of the accidents did not involve another motor vehicle.

Although the accident, injury, and fatality rates on SR 54 are below the statewide averages, the numbers have steadily increased along the project corridor over the last 3 years. While the accident rate increase, as depicted in Table 5a below, is not very significant from 2006 to 2008, it is highly likely that

this trend would continue with increasing traffic volumes and worsen given the present capacity of SR 54 if the road is not improved to accommodate projected traffic volumes.

The statewide accident rates have declined over time (see Table 5b). While there may be other factors to be considered in this trend, there is a possibility that the increasing traffic volumes along the project corridor, and consequently, it's decreasing carrying capacity, plays a vital role in the numbers of accidents and/or injuries reported along SR 54.

SR 54/Fayetteville Road Accident Data	2006	2007	2008
Accidents	135	148	168
Injuries	40	58	65
Fatalities	0	0	0

Table 5a: Accident Data for 2006 – 2008 along project corridor

SR54/Fayetteville Road Accident Data	2006		2007		2008	
	SR 54	Statewide	SR 54	Statewide	SR 54	Statewide
Number of Accidents	135	52,960	148	44,847	168	40,446
Accident Rate	440	787	432	649	490	612
Injuries	40	19,594	58	15,661	65	14,106
Injury Rate	127	291	169	227	190	213
Fatalities	0	138	0	106	0	88
Fatality Rate	0.00	2.05	0.00	1.53	0.00	1.33

Table 5b: SR 54 Accident Data vs. Statewide Accident Data for 2006 - 2008
Accident Rate indicated as 100 Million Vehicle Miles for Urban Principal Arterial

C. Logical Termini

Logical termini are defined as rational end points for a transportation improvement and rational end points for a review of the environmental impacts. The most common termini are points of major traffic generation, especially intersecting roadways. In order to ensure meaningful evaluation of alternatives and

to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated shall (1) connect logical termini and be of sufficient length to address environmental matters on a broad scope; (2) have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and (3) not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. The project would widen 5.3 miles, and both the northern and southern termini of the project link to an existing four lane section of SR 54 in both Clayton and Fayette Counties. No other improvements in the area are dependent on the widening of SR 54, in essence, this project has independent utility. Please see figures 4a and 4b.

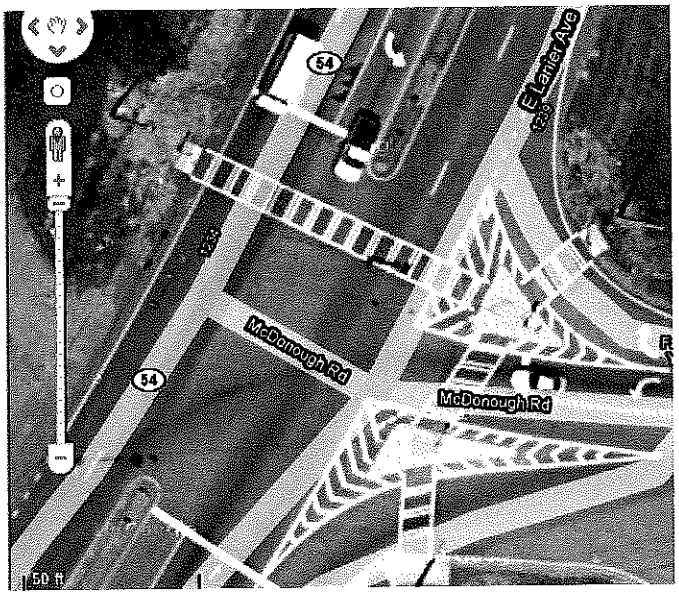


Figure 4a – SR 54 & McDonough Road

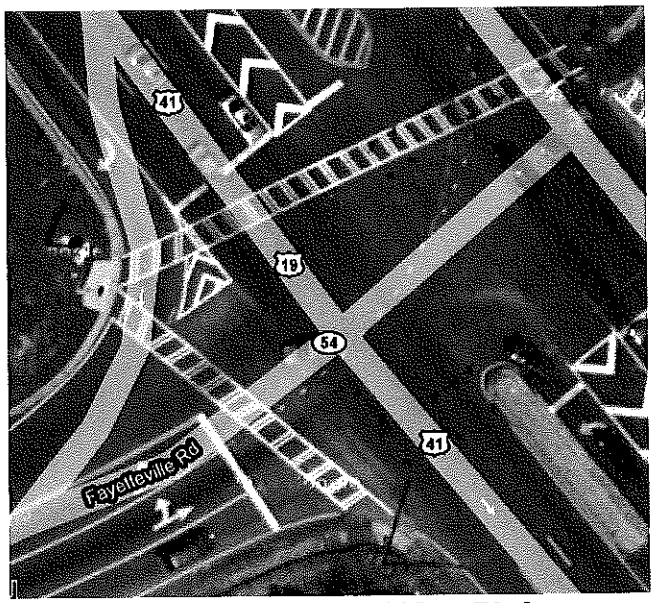


Figure 4b – SR 54 & US 19/41/SR 3/Tara Blvd

Figure 4a & 4b – Project Logical Termini

II. DESCRIPTION OF ALTERNATIVES

A. Introduction

The proposed project alignments were developed by the GDOT's Office of Roadway Design in conjunction with the Offices of Program Delivery and Environmental Services, which, as a standard

procedure, includes environmental parameters as a part of the location investigation prior to laying out a proposed alignment. Basic data on the corridor is gathered and studied. Data for this project included, at a minimum, aerial photography, topographic maps, traffic (existing and projected), previous studies, wetland inventory maps, soil surveys maps, floodplain maps, and Georgia Department of Natural Resources historic resource survey maps.

Wetland and hydric soil boundaries, floodplains, parks and recreational facilities, known or suspected historical and archaeological sites, existing ROW, possible UST/landfill/hazardous waste sites, and areas of possible endangered species habitat were delineated on the aerial photography prior to laying out an alignment. Also identified on the aerial photography are other "controls" such as churches, cemeteries, schools, hospitals, and any other noise sensitive areas. Only at this point was the proposed alignment developed with every attempt being made to avoid sensitive ecological, historical, and archaeological areas. In the event that avoidance was not possible, every attempt was made to minimize harm to such resources.

The proposed alignment, once laid out on aerial photography, was then field checked and additional refinements were made to further minimize harm to both the natural and built environment.

Discussed below, are the two alternatives for the widening and improvements of SR 54/Fayetteville Road that were considered: the build alternative and the no-build alternative.

B. The Build Alternative

In 1997, the proposed project originally consisted of widening the existing two lane facility to a rural four lane section with a variable 20-foot raised to 44-foot depressed median and 10-foot shoulders. The widening would begin just north of McDonough Road in Fayette County and would extend to US 19/US 41/Tara Boulevard in Clayton County for a distance of 5.3 miles. The 20-foot raised median was proposed for a short distance from the beginning of the project to Banks Road in order to extend the urban section out of Fayetteville. A 44-foot depressed median was proposed from Banks Road to US 19/US 41.

Turn lanes and median openings would be provided as necessary along the project corridor. The existing ROW along this portion of SR 54 is 80 feet. The total required ROW for project construction was to be 140 feet for the section with the 20 foot median and 170 feet for the section with a 44-foot median.

In 1997, the initial alternative resulted in a no adverse effect finding for the Mundy House, a National Register of Historic Places (NRHP) eligible resource. All widening was to the west. In 1997, the Wallace House was not a NRHP eligible resource. Because the history survey was over five years old, another survey was done in 2007. The 2007 history survey reversed the eligibility of the Wallace House, and it is now a NRHP eligible resource. The proposed project design was then revised and the alignment was shifted to the east in the area of the Wallace House holding the edge of ROW on the west side of SR 54, to avoid the Wallace House which had greater structural integrity than the Mundy House and was still occupied and in use. This shift resulted in an adverse effect to the Mundy House.

During the original history survey in 1997, five eligible historic properties were identified within the proposed project's Area of Potential Effect (APE). These historic properties were the Jackson House, Camp House, Brown House, Mundy House and the Callaway House. It was also determined that project implementation would result in a Finding of No Adverse Effect to all of the resources. However, due to the 2007 design changes as a result of the history resurvey described above, the No Adverse Effect call for the Mundy House changed to an Adverse Effect. The proposed design now required 60 to 68 feet of ROW from within the boundary of the Mundy House thereby reducing the setback of the house by half. Because ROW was to be required from an eligible historical resource, which is protected by Section 4(f), the GDOT was required to consider alternatives to the proposed alignment in order to, at best, avoid impacting it completely, or at least, minimize the impacts of the proposed project on it.

In efforts to find possible avoidance alternatives to impacting the Mundy House, a technical assistance meeting was held at the Mundy House with the Federal Highway Administration (FHWA), the State Historic Preservation Office (SHPO), GDOT, Arcadis (design consultant), and Greenhorne &

due to the proximity of the NS Mundy House to the Mundy House, the design is not feasible to change

O'Mara, Inc (a engineering & consulting firm) on July 8, 2008. The purpose of this meeting was to discuss the adverse effect of the proposed project on the Mundy House and possible design avoidance alternatives that could be considered or implemented. As a result of this meeting, SHPO stated their preference and support for a minimization alternative that would reduce the amount of required ROW from 60 to 68 feet to only approximately 18 feet.

This minimization alternative would have 4-11 foot lanes, 4-foot bike lanes, 5-foot sidewalks, a 14-foot flush median and a wall in the area of the Mundy House. The wall would minimize the impact on the Mundy House property and would also define the yard for the resource. This alternative would acquire 0.18 acre of ROW from the resource, and the driveway easement would extend further into the property.

The SHPO representatives concluded that this alternative, though not completely eliminating the adverse effect of the proposed project on the Mundy House, would minimize the extent of it because the Mundy House would continue to exist as a historic resource, retaining its defining characteristics while meeting the project's Need and Purpose. The Mundy House would also remain available for possible renovation as a historic resource. After coordination between all meeting attendees was concluded, it was decided that the design changes to minimize impacts to the Mundy House be incorporated into the proposed project design thus defining what is now referred to as the build (proposed) alternative.

Based on the design changes made as a result of the July 2008 technical assistance meeting, the proposed project would now consist of the widening of SR 54 from the existing two lane facility to an urban four lane section (12-foot lanes) with a 24-foot raised median, 4-foot bike lanes in each direction and 16-foot shoulders throughout the project corridor, except in the area of the Mundy House (approximate station numbers 263+00 to 267+50), where there would be 4-11 foot lanes, 4-foot bike lanes, 5-foot sidewalks, and a 14-foot flush median (see Figures 5 & 35). The required ROW would vary to approximately 210 feet, except at the Flint River, where required ROW would be approximately 255 feet. Also, beginning at McDonough Road in Fayette County, the widening would occur mostly on the north

and west sides of the existing roadway up to a point south of Morning Creek. From Morning Creek to a point near Camp Creek, the widening would occur on the northwest side of the roadway and symmetrically across the bridge locations. From Camp Creek to a point near US 41, the widening would occur mostly on the southeast side. Just south of US 19/US 41, the proposed roadway would be on new location to correct a deficient horizontal curve on its approach to US 41. In addition, the proposed project would widen GDOT Bridges over Morning Creek, Camp Creek, and the Flint River. The proposed bridges would be approximately 38 feet X 240 feet over Morning Creek, 38 feet X 160 feet over Camp Creek, and 38 feet X 240 feet over the Flint River.

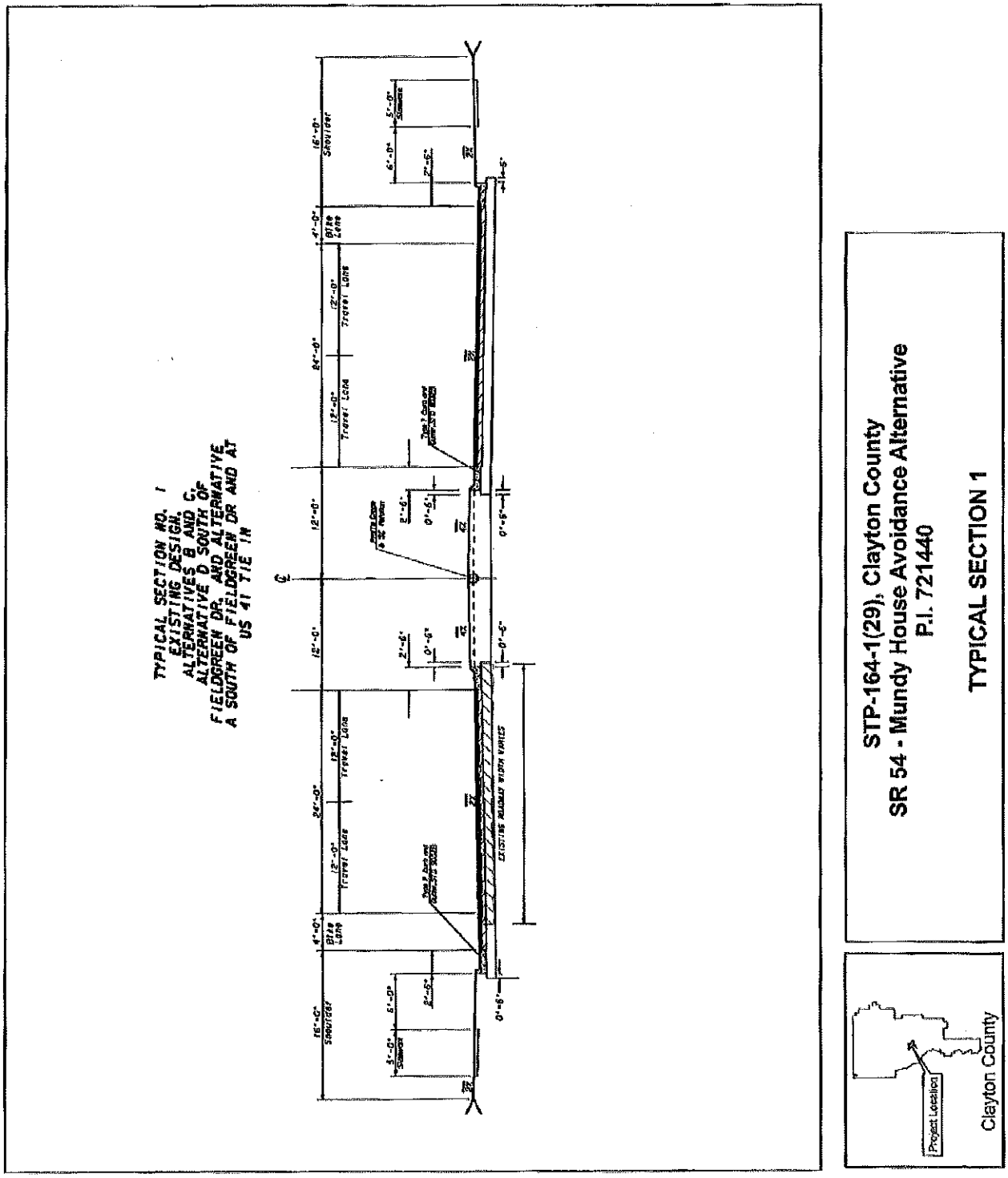


Figure 5 – Typical Section of Initial Design

C. The No-Build Alternative

No action would be taken by GDOT to widen and improve SR 54. The no-build alternative would not have any effects to the environment and the Mundy House. This alternative would not increase the traffic capacity, add sidewalks and bike lanes, or address safety.

D. Alternatives No Longer Under Consideration

In considering possible alignment alternatives for the proposed project, wetland or hydric soil boundaries, floodplains, parks and recreational facilities, known or suspected historical and archaeological sites, existing ROW, possible UST/landfill/hazardous waste sites, and areas of possible endangered species habitat were delineated on the aerial photography prior to laying out an alignment. Also identified on the aerial photography are other "controls" such as churches, cemeteries, schools, hospitals, and any other noise sensitive areas.

Only at this point was the proposed alignment developed with every attempt being made to avoid sensitive ecological, historic and archaeological areas. In the event that avoidance was not possible, every attempt was made to minimize harm to such resources.

The proposed alignment, once laid out on aerial photography, was then field checked and additional refinements were made to further minimize harm to both the natural and built environment. The following are alternative alignments no longer under consideration:

1. SR 54 Existing Alignment Avoidance Alternative. –"A"

Avoidance Alternative A would begin at the intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. It would continue north along the existing alignment, widening to the right to include four 12-foot lanes, 4-foot bike lanes, 11-foot shoulders with 5-foot sidewalk and a 24-foot raised median. At Fieldgreen Drive the roadway would taper to a 4-foot raised median and 10-foot shoulder and

the bike lanes would end. Gravity or keyed retaining walls would be used in front of the Mundy and Wallace historic resources to reduce the cut and fill limits to approximately the back-of-wall. This allows the roadway to fit within the existing 80 feet of ROW. Earthwork and a slope easement to tie in the driveway would be required. This driveway impact is expected to be minimal. After intersecting Towngate Boulevard the roadway would continue on new location until ending at the existing signalized intersection with US 41.

This alternative would require a GDOT design variance to allow a median break less than 660 feet from the US 41/SR 54 intersection. From a traffic capacity standpoint, in the area of the Mundy House, this alternative severely restricts access to the roadway, and though it provides for smoother traffic flow by eliminating potential conflict points associated with turning movements, this comes at the expense of requiring numerous local residents to execute right-turn/U-turn movements for any navigation that requires a left turn, thus a median break would have to be provided.

The Shiloh Baptist Church across the street from the Mundy House and the nearby subdivisions to the north and south would be limited to right in/right out access/egress because the 4-foot median is not wide enough for a turn lane. This alternative would not provide bike lanes for the entire length of the project and would have a LOS of D and E during the AM and PM peak hours respectively in the build year (2013). The LOS would fall to F in the AM and PM peak hours by the design year (2033).

2. East Avoidance Alternative –"B"

The East Avoidance Alternative would completely avoid the Mundy House. This alternative begins at the intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. The typical section would consist of four 12-foot lanes, 4-foot bike lanes, 16-foot shoulders with 5-foot sidewalk and a 24-foot raised median. The alignment would veer east onto new alignment approximately 550 feet north of Cypress Estates Drive. The roadway would cross an existing subdivision and tie-ins would be constructed with SR 54 and Castlebrooke Drive. The alignment would cross two streams - one intermittent and one

ephemeral - before traversing an abandoned airfield and turning northeast, passing between the Clayton County Courthouse and another existing building. Access would be provided to the Clayton County Judicial Complex and the Clayton County Aquatic Center. The roadway would tie into US 41 at the existing signalized entrance to the Judicial Complex. The typical section would remain unchanged from the original design. A windshield survey did not identify any historic resources along the proposed alignment. The East Alternative would cross two drainages. There are no wetlands near the project. The East Alternative would displace approximately ten residences in addition to the eight potential displacements that are expected from the western terminus of the project just north of McDonough Road to Cypress Estate Drive/Swamp Creek Drive for a total of approximately 18 displacements. Capacity analysis was conducted at the projected intersection of SR 54 with US 41. This analysis took into account the projected hourly turning volumes during the build and design years. The SR 54/US 41 intersection would be at LOS E during the AM peak hour and LOS D during the PM peak hour in the build year. By 2033, all peak periods would be at LOS F.

3. West Avoidance Alternative –"C"

The West Alternative begins at the Intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. The typical section, which is the same as the East Avoidance Alternative, would consist of four 12-foot lanes, 4-foot bike lanes, 16-foot shoulders with 5-foot sidewalk and a 24-foot raised median. The alignment would follow existing SR 54 until it intersects Fieldgreen Drive, then would turn northwest on new alignment and cross an Atlanta Gas Light pipeline easement. The roadway would turn further northward to parallel the easement. The alignment would then turn directly north to avoid a fire station and would cross the gas pipeline again. It would then cross Roberts Road shortly before ending at Flint River Road.

A tie-in to Roberts Road would be constructed to provide access for emergency vehicles. A signal would be installed at the proposed intersection with Flint River Road. The alternative would require two

commercial and four residential displacements in addition to the eight potential displacements that are expected from the western terminus of the project just north of McDonough Road to Cypress Estate Drive/Swamp Creek Drive for a total of approximately 14 displacements. This alternative would add length to the SR 54 alignment. The cost to build the West Alternative would be the most expensive of all the design alternatives considered because the length of new alignment is the longest and because of the two gas pipeline crossings.

Northbound traffic would turn right on Flint River Road to continue on SR 54 then turn north on US 41. The addition of SR 54 traffic onto Flint River Road would have serious consequences for the new intersection. The new intersection would be at LOS F during both the AM and PM peak hours immediately after construction. Construction on Flint River Road would be required to mitigate this impact. Delays caused by the West Avoidance Alternative are higher than those caused by any of the Alternatives that intersect US 41.

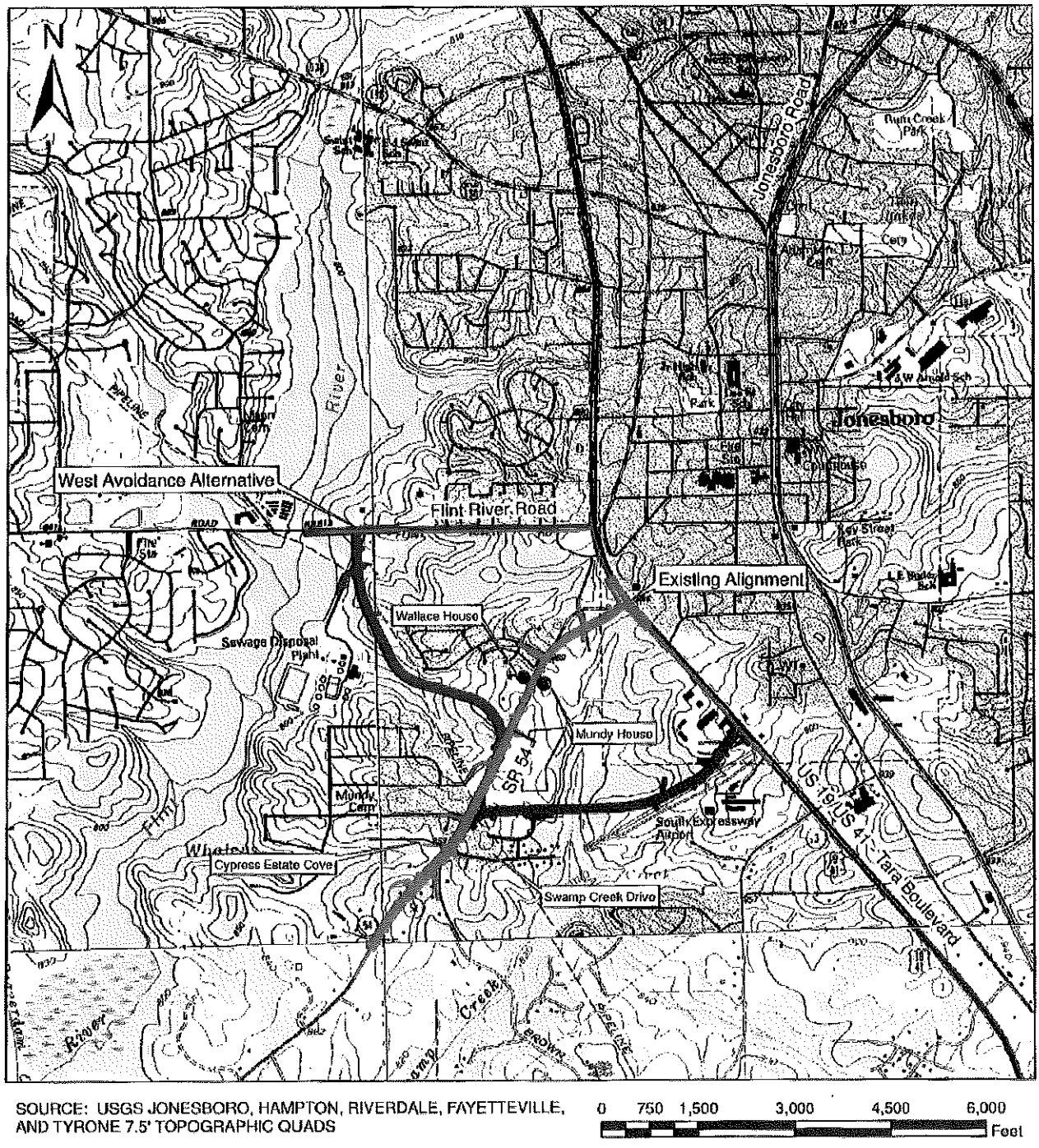


Figure 6 – East/West Avoidance Alternatives Map

4. Initial Alternative –"E"

For the entire project length of 5.3 miles, the project would consist of widening the existing two-lane facility to an urban four-lane (12-foot lanes) section with a 24-foot raised median, 4-foot bike lanes, sidewalk, and a 16-foot shoulder on each side. All widening was to the west.

This alternative required the acquisition of 60 – 68 feet of ROW from the Mundy House, a National Register eligible property. Design changes were made to minimize project impacts to this protected resource.

III. ENVIRONMENTAL CONSEQUENCES

A. Types of Effects: Direct, Indirect, and Cumulative Effects

The Council of Environmental Quality's (CEQ) *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR §1500-1508) requires that not only direct impacts, but indirect and cumulative impacts (ICI) also be evaluated.

Direct, indirect, and cumulative effects can be defined as follows:

Direct effects are caused by, and coincide in time and place, with the action.

Indirect effects are caused by the action and are later in time, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

In an attempt to analyze, the area of potential indirect effects has been extended outside the project corridor. This project is located between Fayetteville in Fayette County and Jonesboro in Clayton County, Georgia and would improve access to these cities for residents within the project corridor. East to west, the impacts analysis focused on the immediate project corridor and includes the cities of Jonesboro and

Fayetteville. North to south, the area of analysis includes the cities of Riverdale and Hampton as well as existing developments.

Cumulative effects are the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The proposed project begins at McDonough Road and ends at US 19/41/SR 3. In an attempt to analyze the area of potential indirect and cumulative effects GDOT looked outside the project corridor utilizing a east-west corridor from Peachtree City in Fayette County to Stockbridge Georgia in Henry County. A base year of 1990 was also chosen for the analysis, a period of noticable population growth and development in both Clayton and Fayette Counties (refer to B. Planning Basis of Action), to compare changes in land use and help assess cumulative impacts. 2030 was chosen as a reasonable future horizon.

Because they are not environmental resources, indirect and cumulative effects analysis has not been included for the following sections: Section 4(f) Applicability; Invasive Species Survey; U.S. Coast Guard/Corps of Engineers Applicability; Relocations; Construction; and USTs/Hazardous Waste.

B. Effects on the Social Environment

1. Land Use Changes

The current Clayton County Comprehensive Plan was completed in 1992 with an outlook to 2013. This plan has been partially updated and amended as recently as 1996. This update of the Clayton County Comprehensive Plan serves the planning period of 2005 – 2025. The Clayton County Comprehensive Plan is in the process of being updated. The Fayette County Comprehensive Plan was adopted on April 22, 2004, and a Partial Update was adopted in June 2007. The next major update is due by June 30, 2014. The Fayette County Comprehensive Plan serves the planning period of 2004 – 2025. According to both comprehensive plans, existing land use in the proposed project area consists primarily of residential

development with several public institutions interspersed between these residential areas. Future land use would remain primarily residential with more "Conservation Residential" - single-family, detached-unit residential development at a maximum of one (1) unit per acre. This residential classification is characterized by open space preservation within residential developments and is appropriate for development of limited amounts of estate housing on five to ten acre lots (refer to Figures 7 – 10, Clayton County and Fayette County Land Use Maps). In the area of SR 54 and Corinth Road (Fayette County), the land is currently undeveloped but zoned commercial for future use. The adjacent subdivisions exclude the expansion of this area to the north. No expansion of the existing commercial zoning has been recommended.

Direct Effects

The roadway project is aligned in such a way as to minimize effects to existing development and current land use changes would remain in future land use plans. While efforts were made to minimize effects to existing development, the proposed project would result in unavoidable impacts to some residencies and businesses. As the existing roadway would be widened from a two-lane facility to a four-lane one, some non-transportation use of land would change to transportation highway use. There are approximately eight potential displacements as a result of project implementation with a possibility of an additional three to five more in the area of the A.J Mundy house, where a design shift was made to avoid a historic resource in 2010. Design has not been finalized in the area of the shift. Therefore, the direct effects of the proposed project would potentially result in the conversion of existing undisturbed areas of land, residential and commercial use of land to transportation use.

Indirect Effects

Mr. Tom Williams, assistant director of Fayette County Planning and Zoning and Ms. Beverly Ramsey of Clayton County Planning and Zoning were contacted regarding the proposed project and its potential impacts to the respective counties. The proposed project would foster development within and around the project area and beyond. The project corridor consists of a mixture of residential, agricultural,

and public institutions (one school and at least three churches). There is currently a piece of property along SR 54 in Clayton County that has been zoned to a commercial status for a strip mall facility pending plan approval.

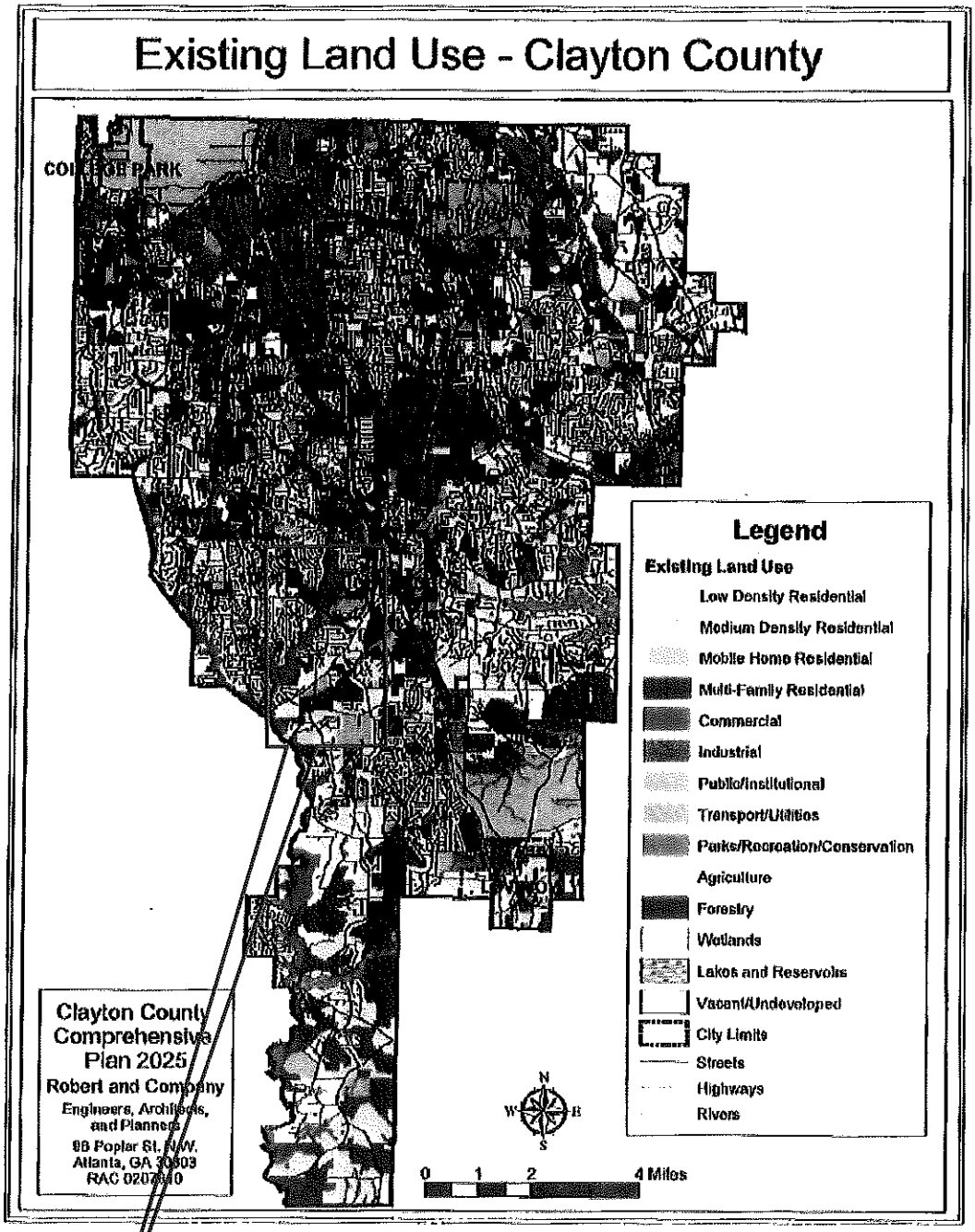


Figure 7 – Clayton County, Existing Land Use Map

Project Area

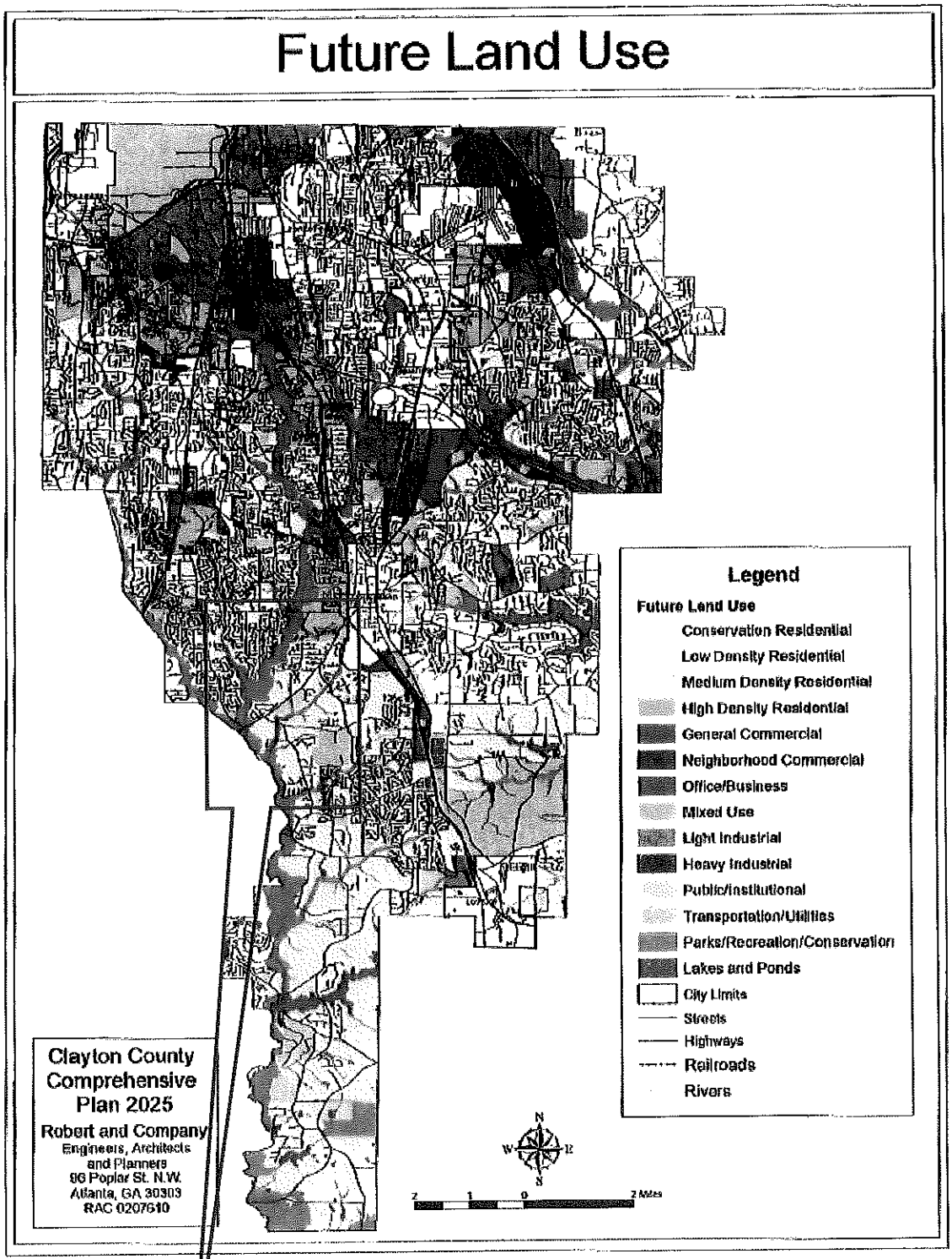
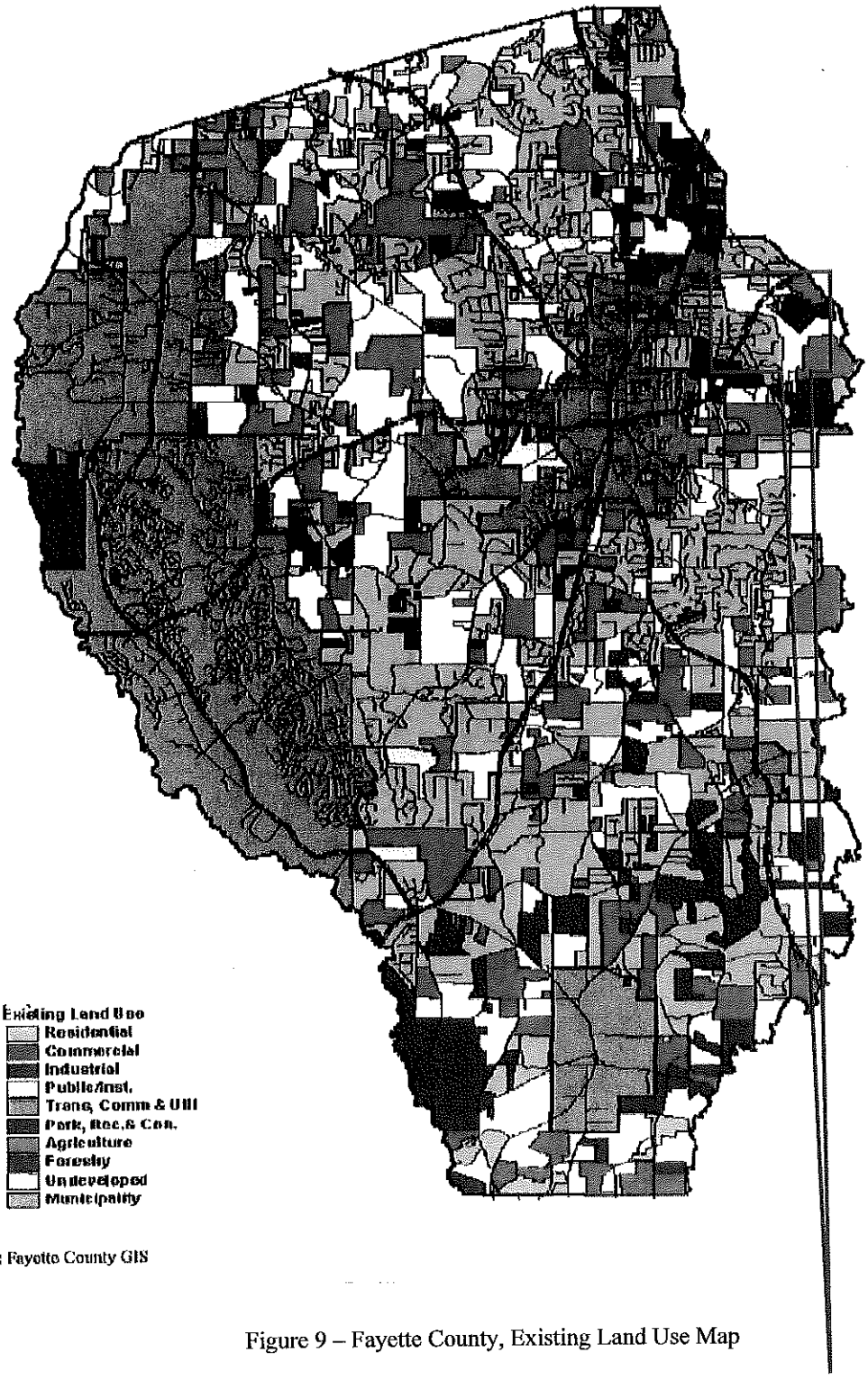


Figure 8 – Clayton County, Future Land Use Map

Project Area

EXISTING LAND USE



Source: Fayette County GIS

Figure 9 – Fayette County, Existing Land Use Map

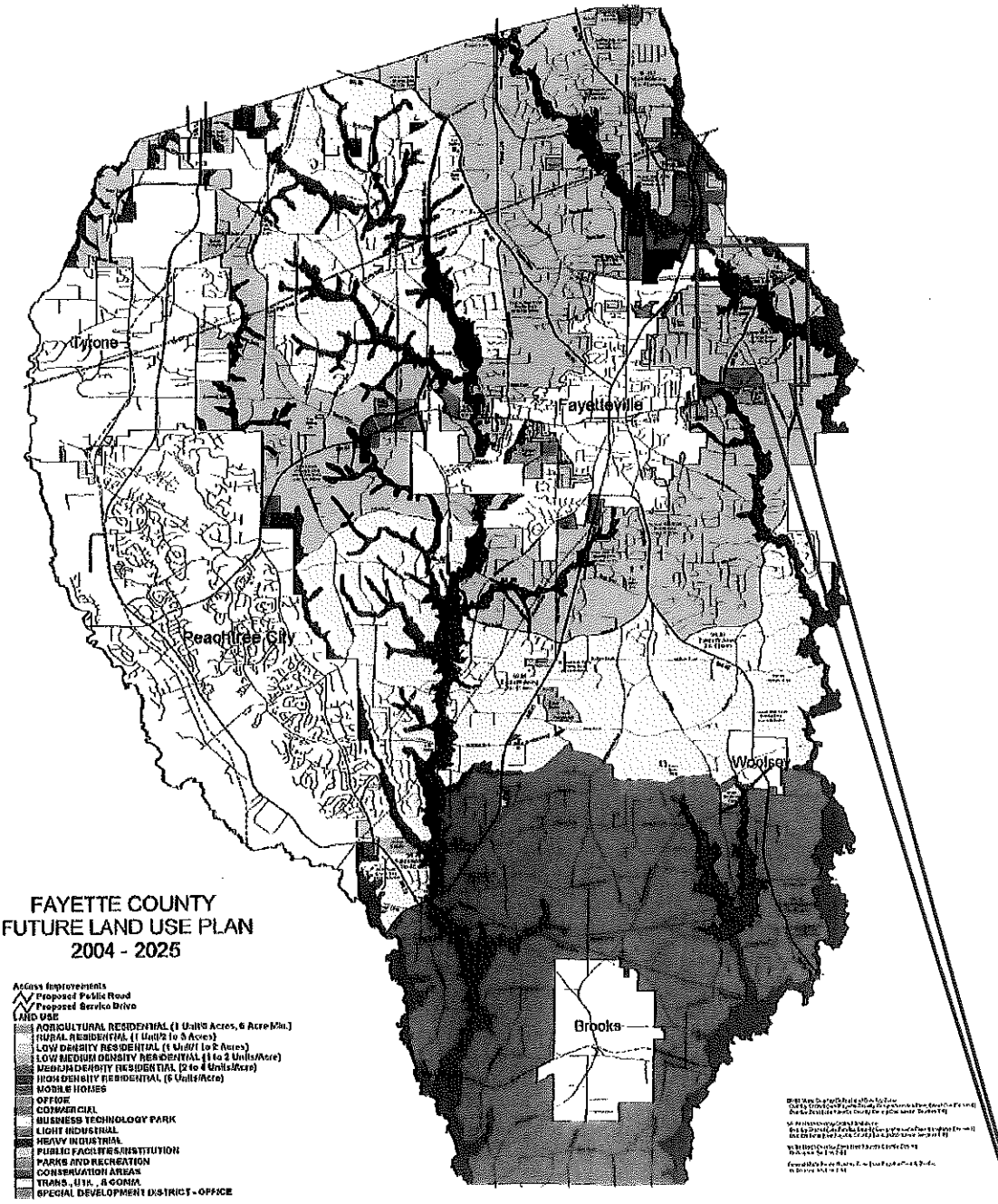


Figure 10 – Fayette County, Future Land Use Map

Project Area

As the major east-west connector between Clayton and Fayette County, and as a major transportation corridor in Fayette County, it is expected that the proposed project would stimulate more commercial businesses and residential improvements beyond the project area.

Cumulative Effects

It is reasonable to assume that this project would stimulate additional development in areas earmarked for commercial and residential growth. The purpose of this project is to address additional capacity needs along this segment of roadway on SR 54. There is the potential for more commercial development over time as the result of increased access between the adjoining counties and their respective cities. It is highly probable that this project would stimulate growth in the area that could result in land use changes. The Clayton County Planning and Zoning Department expected to see a mixture of residential and commercial growth associated with the proposed project especially in the areas closer to Tara Boulevard. There is the potential that the proposed project would facilitate zoning changes and requests for zoning variances in the future as commercial ventures move in. Although it is expected that there would be less commercial development in the area without the proposed project, there are currently no major developments (commercial or residential) that are highly dependent on this proposed project being completed. Along SR 54 East of Fayetteville, the existing nonresidential development consists of commercial, office and industrial uses. Commercial land uses are indicated from the city limits of Fayetteville east to McDonough Road. On the south side of SR 54, this commercial activity is limited to the properties fronting on SR 54 only for a depth necessary to provide adequate acreage for commercial uses. This allows for the coordination of commercial uses along the frontage of SR 54 with residential uses to the rear. Office land uses then continue on the north side of SR 54 opposite McCurry Park. The completion of this project would provide efficient access from Clayton County to the expected commercial developments in Fayette County beyond the western project terminus at McDonough Road.

2. Economic

The amount of additional ROW needed to implement the proposed project would be minimal and would not result in significant effects on the tax bases for Clayton and Fayette Counties. Sales volumes for some area businesses may temporarily drop during the actual construction of the project; however, following construction, area businesses should benefit from the expected improvement in access and increases in traffic volumes. Newly planned developments would be provided with appropriate access.

There would be no major adverse impacts to neighborhoods, services, and/or community facilities as a result of project implementation. The proposed improvement would enhance safety for the highway user and increase accessibility to business and residential driveways.

The proposed improvements to SR 54 from Tara Boulevard in Clayton County to McDonough Road in Fayette County would not cause major adverse impacts to neighborhoods. However, reductions in yard and property size would occur in some areas along the corridor. The project has been designed to minimize effects to individual properties where possible, and the symmetrical widening would result in less damage to property than would widening on one side. Property owners would be compensated for all ROW acquisitions in accordance with applicable laws and regulations.

Although the 24-foot wide raised median included in the proposed widening would have crossovers at major intersections and where otherwise deemed necessary, movements at most sub-divisions and private driveways would be limited to one way entering and exiting. However, the median would enhance safety for the highway user and ensure that the capacity improvements are not offset in the future by heavy left turning movements.

Direct Effects

The amount of additional ROW needed from residential and business properties to implement the proposed project would be negligible relative to the total amount of residential and business property in the Cities of Jonesboro and Fayetteville in both Clayton and Fayette Counties. Therefore, the proposed project would not result in a significant effect on the tax bases for both counties. The proposed project would maintain access to the businesses along the corridor. Property owners would be compensated for all ROW acquisitions in accordance with applicable laws and regulations.

The expenditure of funds for the construction of the project would result in a short-term boost to the local economies in the region as materials and services are procured and construction jobs are focused along the corridor.

Indirect Effects

Sales volumes for some area businesses may temporarily drop during the actual construction of the project; however, following construction, area businesses should benefit from the added business as a result of increase in traffic flow. Additionally, the proposed project is not expected to precipitate immediate substantial development along the corridor. Therefore, the proposed project may result in a short-term indirect effect to the businesses in the immediate area during project construction. However, it is possible that the project would result in a positive economic change to those same businesses after project completion due to added capacity and traffic through the corridor.

Cumulative Effects

The proposed project potentially could precipitate more development along the corridor and the adjoining cities in Clayton and Fayette counties. Additional businesses could relocate to this area as a result of this project over time. Therefore, the proposed project could potentially result in positive cumulative effects to the economy of the immediate area in Clayton and Fayette counties.

3. Relocations

The project alignment was chosen to minimize impacts to residents and property to the fullest extent possible. The impact of the build alternative on residential and commercial properties has been assessed through a Conceptual Stage Study (CSS). The CSS was conducted to assess relocation needs of those displaced. Since the CSS was done in 2008, another design modification was done in the area of a recently discovered eligible historic resource, the A.J. Mundy House, to shift the alignment off it and avoid an adverse impact to it. This design shift may result in an additional three to five displacements, but this is not conclusive until design is finalized. There were no displacements of special public interest or safety (i.e., fire station, post office, etc) noted at time of field inspection. Please refer to Appendix D, Conceptual Stage Study.

The proposed project would displace approximately seven owner occupied single family residences. Also, there is one business that may be affected due to the proximity of the required ROW. Displacement of this business would affect approximately seven employees. Every effort would be made to assist the business in relocating within the same area, rather than relocating to other areas or closing entirely. In order to minimize the unavoidable effects of ROW acquisition and displacement of people and businesses, the Department would carry out a ROW and relocation program in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646), as amended in 1987. Owners of property to be acquired would be offered and paid fair market value as established by an appraiser for their property rights.

Given the amount of replacement housing generally available in the local market, all of the residential relocatees would be anticipated to be able to relocate in the area. Assistance would be provided in the form of moving expenses in order for them to relocate. In addition, owner or tenant occupants of residential housing that would be displaced would be provided financial assistance for increased costs they may encounter in buying or renting. Owner occupants may also be provided financial assistance for

certain other incidental expenses such as closing costs and increased interest payments required for their purchase of a replacement home. The State's Relocation Program is realistic and is adequate to provide orderly, timely and efficient relocation of displaced persons.

4. Community Cohesion

Direct Effects

The purpose of the proposed project is to avoid or reduce traffic congestion by widening SR 54 from just north of McDonough Road in Fayette County to US 19/41/SR 3/Tara Boulevard in Clayton County to address additional capacity needs along this section of roadway. The proposed project would not introduce new or additional barriers to existing neighborhoods along the project corridor. The proposed project is not anticipated to cause substantial changes to population structure or demographic patterns in the project area.

The proposed project would retain the existing intersections with side streets and local access would be maintained. No properties would be cut off from utility or other municipal services. The project would benefit residents, schools, churches and businesses in the area by improving east-west access between Clayton and Fayette counties, improving the safety of both motorists and pedestrians, and improving the response time of law enforcement, fire protection and emergency medical services, as well as reducing congestion in the area.

5. Churches and Institutions

Direct Effects

One church would be affected by the proposed project. However, this effect would be very minor. Shiloh Baptist Church is located at 8955 Fayetteville Road, Jonesboro, GA 30238-4815. The proposed project would require approximately 42 feet of easement from the church property for the construction of slopes, but, access would be the same and there would be no parking impacts. The proposed project would not negatively affect the congregation and the church facility.

Mundy's Mill High School is located at 9652 Fayetteville Road, Jonesboro, GA. Approximately 54 to 84 feet of ROW and up to 113 feet of easement would be acquired from Mundy's Mill High School as the roadway is being widened to that side. However, existing driveways would be reconstructed in their present location, and there would be no parking impacts. The proposed project would not adversely affect the functionality of the school and its community.

Indirect Effects

The proposed project is not expected to precipitate changes in community cohesion or alter the existing neighborhood demographic; therefore, it is not likely that existing churches and places of worship, and other institutions would be indirectly affected in the foreseeable future.

Cumulative Effects

The proposed project is not expected to precipitate changes in community cohesion or alter the existing neighborhood demographic. While it is possible that additional churches and institutions relocate into or out of this area, that may be independent of the proposed project. Therefore, the proposed project would not result in any reasonably foreseeable cumulative effects to churches or institutions in the immediate area of the project corridor or in the surrounding neighborhoods.

6. Community Impacts/Environmental Justice

In accordance with Executive Order 12898, the proposed project has been analyzed to avoid disproportional adverse effects to minority and low income populations and communities. Minority persons include citizens or lawful, permanent residents of the U.S. who are African-American, Hispanic, Asian-American, American Indian or Alaskan Native. Low income persons are defined as those whose median household income is below the U.S. Department of Health and Human Services poverty guidelines. Minority or low income communities are groups of minority or low income persons who live in reasonably close proximity to one another.

Direct Effects

The project would benefit residents, schools, churches and businesses in the project area by improving access to and from the area in general, improving the safety of both motorists and pedestrians, and improving the response time of law enforcement, fire protection and emergency medical services.

The proposed project is not anticipated to cause substantial changes to population structure or demographic patterns in the project area. Neighborhoods would not be physically divided and the viability of the local communities would not be altered by the potential displacements.

Local travel patterns are anticipated to remain essentially the same, as the primary local road system would retain existing connectivity.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," was signed February 11, 1994. Federal agencies are charged with "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

Two U.S. Census Bureau Census Tracts (CTs) in the vicinity of the proposed project were researched to identify minority and low-income populations; CT 406.07 immediately borders the project on the east (by Tara Boulevard in Clayton County), while CT 1404.06 immediately borders the project on the west (by McDonough Road in Fayette County). Table 6 summarizes the relevant aspects of these CTs below.

Table 6. Census Data from 2000

Census Tract/Census Area	Percent Minority	$0-25K Per household	$25-50K per household	$50-75K per household	$75-100K per household	$100K+ per household
CT 406.07	58.8%	16.4%	30.2%	29.7%	15.1%	8.7%
Clayton County	62.1%	23.2%	35.5%	23.6%	10.4%	7.3%
CT 1404.06	21.9%	13.4%	32.5%	18.8%	12.8%	22.4%
Fayette County	16.1%	10.6%	20.7%	21.9%	18.0%	28.8%
Georgia	34.9%	28.3%	29.3%	19.7%	10.4%	12.4%
U.S	24.9%	28.6%	29.3%	19.5%	10.2%	12.3%

During project development, the project corridor was windshield and pedestrian surveyed for readily identifiable minority or low income communities. It can be deduced from Table 6 that a greater minority population resides in the eastern terminus of the proposed project. Although in the Fayette County segment of the project area (CT 1404.06), the percentage minority population is higher than the percentage of the overall minority population residing in Fayette County as a whole, the opposite is the case for the Clayton County segment of the project area (CT 406.07). In selecting the proposed alignment, the demographics of the area were not a factor, but the effects of the proposed project on the physical and natural environment in conjunction with implementing a geometrically appropriate design.

As previously discussed, the proposed project would displace approximately seven owner occupied single family residences and one business. Given the percentage of minority and/or low income persons residing within the project corridor, the displacement of these residences (assuming that they are occupied by minority and/or low income persons) would not represent a disproportionately high and adverse effect on these communities and populations. There is also no guarantee, given the high percentage of minority populations living in Clayton County, that an alternative alignment would not adversely impact these populations.

7. Public Involvement

A total of 154 people attended the Public Information Open House (PIOH) held for the subject project on July 30, 2009. From those attending, 29 comment forms, 4 letters and 9 verbal statements were

received. An additional 2 comments were received during the ten-day comment period following the, for a total of 44 comments. Six of the verbal statements were repeated on comment forms. Of the comments we received, 11 were in support of the project, 10 were opposed to the project, 5 were uncommitted, and 12 expressed conditional support for the project. There were two officials in attendance: Mr. David Rutledge of Clayton County Department of Transportation and Mr. Phil Mallon of Fayette County Public Works.

A majority of the concerns had to do with the lack of median breaks in front of some of the subdivisions along SR 54. Citizens are concerned about the distances they have to drive in order to make U-turns as opposed to being able to make left turns out of their subdivisions. A few of the concerns had to do with the need for traffic light signals at a number of the intersections along SR 54 because of the frequency of accidents at those intersections as well as the extensive wait time to make left turns out of the subdivisions at those intersections. Some of the comments indicated that the proposed project was not at all needed and its implementation would only encourage and cause traffic problems that do not currently exist.

On December 10, 2009, GDOT sent out response letters to all PIOH attendees who had comments addressing all concerns. Below are the citizen comments and answers provided:

- *Citizen does not think project is needed. It encourages too much traffic in residential area. Shelf the project because of the situation of the economy. US 19/US 41 is in more need of improvements.*

Level of service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream. The current LOS along the project corridor is "E." LOS "E" is characterized by significant delays and average speeds of one-third the free-flow speed or less. Without the proposed improvements along the project corridor, the functional capacity along this segment of SR 54 would continue to decline to unacceptable levels. The existing two-lane roadway simply does not provide the capacity needed to accommodate current and anticipated traffic volumes. Consequently, we believe a four-lane roadway is needed to handle the current and future traffic demands.

- *There is a need for median cuts in front of subdivision or citizen has to drive up to a mile to make U-turns to go the desired direction. Eliminate the Right in, Right out entrances.*

The purpose of the proposed median is to improve the safety of the travelling public. Physical medians accomplish this goal primarily by reducing the number of conflict points including mid-block left turns. It is also recognized that the need for improved safety must be balanced with the need for local access, and median openings are the designated points of local access allowing for left turns and U-turns. Unfortunately, it is not possible to place a median opening at each driveway and street intersection as this would significantly reduce the safety benefits of the median. However, every effort has been made to provide median openings at locations that are safe and minimize the inconvenience to the adjacent subdivisions.

- *Traffic light is needed at certain intersections because of the frequency of accidents and the wait time to get in/out of subdivisions at those intersections. The mentioned intersections are: Hewell Road at SR 54, Fieldgreen at SR 54, and Whaley's Lake Drive at SR 54.*

Signal warrant studies have been conducted at intersections along the project corridor. A signal warrant study is used to determine if an intersection meets minimum engineering requirements for a traffic light. Signals have been proposed at the intersections that meet these warrants as a result of required traffic volumes.

- *What is the construction timeline of the project? When would it start and how long would it take? Project should start sooner than 2010 or 2011.*

The project is currently scheduled in the State Transportation Improvement Plan to begin construction sometime within Fiscal Year 2013 (July 1, 2012-June 30, 2013). The anticipated construction time is 36 months.

- *How does project relieve congestion at the front of the Deer Forest Trail subdivision; how does project impact peak hour and evening traffic, would construction be done on the weekends too?*

By increasing the through capacity and mobility in the corridor, the project is expected to substantially reduce delay and significantly improve the level of service at the Deer Forest intersection

once the project is open to traffic. Regarding project construction on the weekends, the contractor would likely have the option of working on the weekends and may do so in order to reduce the overall construction time.

- *Dad's Farm Subdivision Homeowners Association is concerned that their front entrance would be destroyed and difficult to replicate, suggest placing new lanes on SR 54 West to preserve their entrance. Provide median cut through Margaret Lane.*

Every effort would be made to replicate the existing entrance to the subdivision as much as possible. If replacement of the front entrance is required as a part of the project, additional individual discussions would occur between the Department's staff and the property owners at the time of ROW acquisition.

- *If the stone sign at the front entrance of the Saint Andrews subdivision is affected by the project, would it be replaced with one of a similar material and standard?*

Yes, the stone sign is proposed to be impacted by the project. Additional individual discussions would occur between the Department's staff and the property owners at the time of ROW acquisition which would include materials and standards.

- *Make the outer curb sidewalks of brick or concrete rather than grass for easier maintenance. Who would cut grass along SR 54 and how often would this be done?*

The brick sidewalk buffer is typically only used when a 2-foot buffer is provided. This project would have a 6-foot buffer. Consequently, a brick buffer may not be considered aesthetically pleasing in this case. Grass adjacent to a state highway is typically maintained by the Department. However, due to budgetary constraints, the frequency of landscaping and maintenance has been greatly reduced and would be performed on an as needed basis. Typically, grass is cut twice a year.

- *US 19/US 41 South through the SR 54 intersection is not a true 3-lane road as it tapers off and does not provide necessary merge distance. This should not be shown on plans as three lanes or all three lanes should be extended on US 19/US 41 to the next intersection.*

This project maintains the existing through lane configuration of US 19/US 41. Widening along US 19/US 41 may be warranted, but such improvements are beyond the scope of this project and would need to be done under a separate project.

- *The typical section for this project should be made to match the future Fayette County project, East Fayetteville bypass, at the point at which both projects intersect/cross.*

Coordination has occurred with Fayette County on the future bypass and the intersection project that would precede the bypass. These projects would be coordinated as much as possible.

- *Change PIOH times from 6pm – 8 pm, advertisement signs not visible enough, need more displays/engineers to explain and answer questions at open house; have public meetings where there is presentation and question/answer session, not open houses. Need PIOH information on website. Small copies of layouts should be handed out at the open houses.*

Thank you for your suggestions on ways we may improve our public involvement efforts. To maximize convenience to the public, we typically conduct our open houses between 4:00 p.m. to 7:00 p.m. when most people are on their way home from work; however, the Department is flexible to meet the needs of any community on a case by case basis. The Department has adopted the open house format because it fosters greater participation by allowing those who may not feel comfortable speaking in front of an audience the opportunity to have one-on-one interaction with a member(s) of the project team on any topic whether general or specific. Typically, information distributed at the PIOH is also made available on our website along with copies of the layouts. It is our policy to have this information posted on the Department's website no later than the day following the open house in the event that additional questions regarding the project arise. This also allows the Department to accommodate those who were not able to attend the meetings.

- *The property located at 9550 Fayetteville Road is surrounded by a historical boundary. How does this affect the project?*

The property at 9550 Fayetteville Road is surrounded by a historic boundary because it was determined to be eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the National Historic Preservation Act of 1966 as amended is a federal law requiring any federal undertaking – such as a highway project – to conduct studies that identify and evaluate historic properties for the NRHP. This property was determined to meet the eligibility criteria for listing in the NRHP. Once determinations of eligibility have been made, the project must be designed to avoid or minimize harm to those properties which is the case with the proposed design.

- *Proposed changes caused by the project would affect night watchmen residences and public enjoyment of the small recreational fishpond that has been opened to the public for a small fee since 1976. Property owner requests that acoustic barriers and trees be planted between house and road to preserve quality of green space and lifestyle of night watchmen.*

The use of vegetative or structural barriers (earth berms, vegetation, and freestanding walls) was considered for all areas impacted by noise. Among the most common types of barriers are earth berms and free-standing walls. The optimum situation for the use of free-standing noise barriers results when a dense concentration of impacted sites lies directly adjacent to and parallel with the highway ROW. In these instances, one barrier can protect many people at a relatively low cost per impacted site. Guidelines adopted by the Georgia Department of Transportation to ensure that the maximum number of people benefit from each dollar spent on noise abatement limit the cost of barriers to $50,000 per impacted residence. Where the cost per unit for an effective noise barrier (one that would reduce noise levels by at least five decibels) would exceed this amount, the wall is not considered a reasonable use of public funds and no abatement is proposed.

In the case of this project's study area, the majority of impacted receivers represent residential dwellings with direct driveway access to SR 54. Noise barriers are not considered reasonable for receivers

where driveway access must be maintained. The break in the barrier to allow access renders the barrier ineffective.

C. Effects on the Cultural Environment

1. Cultural Resources

In compliance with Section 106 of the National Historic Preservation Act of 1966 and amendments thereto, the proposed project has been surveyed for archaeological and historic resources, especially those on or eligible for inclusion in the NRHP. The purpose of the survey was to locate, identify and evaluate the significance of any historic and archaeological resources within the project corridor. The survey boundary and methodology were established using the GDOT/Federal Highway Administration (FHWA) Cultural Resource Survey Guidelines. These guidelines were established as a result of past interaction with the State Historic Preservation Officer (SHPO) and his staff and were agreed upon by FHWA and the SHPO.

The Department of Natural Resource's Clayton & Fayette Counties survey for historic resources was consulted in preliminary identification of historic resources. Lists of current and pending NRHP properties were checked and aerial photographs along the length of the proposed project were consulted. A field survey for potentially eligible historic resources was also conducted along the project corridor. In addition, the Atlanta Regional Commission, the Clayton & Fayette Counties Historic Preservation Commission, and the historical society were coordinated with in identifying known historic resources.

During the original survey in 1997, five eligible historic properties were identified within the proposed project's Area of Potential Effect (APE). These historic properties were the Jackson House, Camp House, Brown House, Mundy House and the Callaway House. It was also determined that project implementation would result in a Finding of No Adverse Effect to all of the resources.

Since that time, the project area was surveyed by a GDOT historian in March and April 2007 to determine if any historic properties were located within the proposed project's APE that have become 50

years old or older since the last survey. As a result of this identification effort, three additional NRHP eligible properties – the Blalock House, Gilbert Farm and Wallace House – were identified within the proposed project's APE (refer to Figure 11, Project and Resource Location Map). During the field survey and while conducting research on historic resources located along the project corridor, interviews were conducted with various property owners regarding the history of the resources. This information was provided in the Historic Resource Survey Report Addendum (Appendix B), which was submitted to the Georgia SHPO and FHWA on May 21, 2007. Although the Wallace House was previously determined ineligible in 1997, due to changes in how houses of its typology are viewed today, a revised Property Information Form for the resource was submitted on July 18, 2007. In accordance with 36 CFR 800.4(c)(2), the Blalock House, the Gilbert Farm, and the Wallace House were considered eligible for listing in the NRHP by the FHWA and the SHPO.

It should be noted that during the 2007 field surveys, the GDOT historian observed that the Brown House and the Callaway House had been demolished. The Georgia SHPO and GDOT therefore agreed that these resources were no longer considered eligible historic resources.

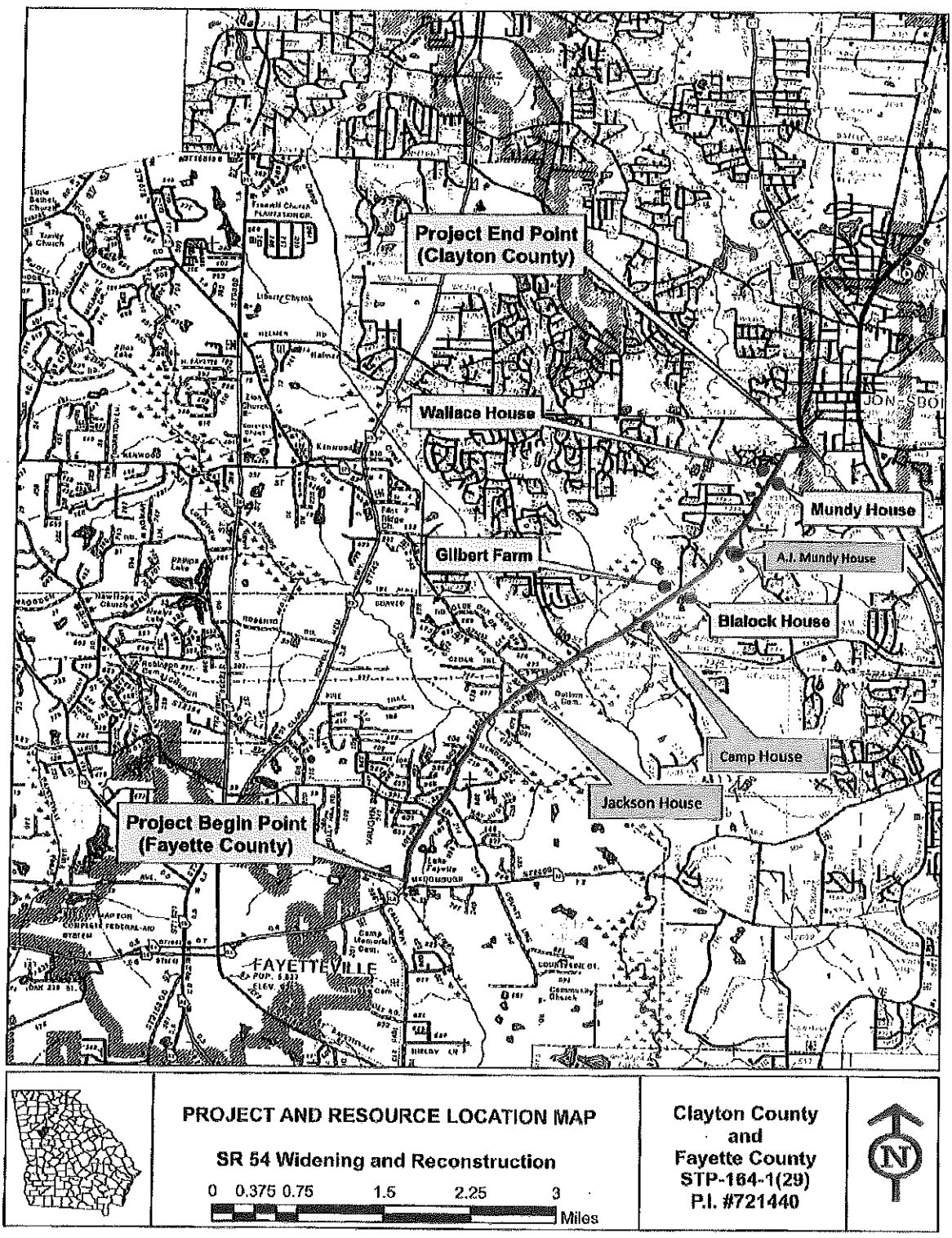


Figure 11 – Project and Resource Location Map

In October 2009, a site visit was conducted to revisit the previous eligibility determination to a resource originally identified during the 1997 survey. As a result of that site visit, the A.J. Mundy House was determined eligible for the NRHP by the Georgia SHPO by concurrence of a memorandum dated October 22, 2009 (refer to Appendix B).

Due to project revisions, additional construction activity is now proposed within the view shed of the Camp House. In order to improve the tie-in at the Mundy Mill Road and SR 54 intersection, Mundy Mill Road has been shifted slightly to the west on new location. However, this project revision would result in a greater distance between the Camp House and the improved roadway as the edge of pavement along the east side of Mundy Mill Road would be located approximately 63 feet further to the west. No changes to the project have occurred within the vicinity of the Jackson House. The finding of No Adverse Effect has not changed for the Jackson House and the Camp House. A finding of No Adverse Effect has also been made for the four most recently identified resources; the Blalock House, Gilbert Farm, the Wallace House, and the A.J. Mundy House. However, there is now an Adverse Effect finding for the Mundy House.

2. Historic Resources

As a result of the all the survey and coordination described above in C.1., a total of seven resources considered eligible for the NRHP or listed in the NRHP were identified within the proposed project's APE. These resources are: the A.J. Mundy House, the Blalock House, the Camp House, the Gilbert Farm, the Jackson House, the Mundy House, and the Wallace House. Table 7 summarizes the NRHP eligible resources determination of effect.

Table 7. Effects to Historic Resources

Resources	Section 106 Determination
A.J. Mundy House	No Adverse Effect
Blalock House	No Adverse Effect
Camp House	No Adverse Effect
Gilbert Farm	No Adverse Effect
Jackson House	No Adverse Effect
Mundy House	Adverse Effect
Wallace House	No Adverse Effect

Description of Historic Resources

A.J. MUNDY HOUSE

The A.J. Mundy House is located at 9116 SR 54 and is a c. 1870 New South Cottage with exterior and interior elements of the Folk Victorian academic style (refer to Figure 12). The A.J. Mundy House features several historic additions extending off the north side and rear east elevations. Characteristic of this type of house, the original house featured a center hallway with paired rooms located to either side of the hallway. The hallway has been extended on the east end to access the rear office and kitchen, as well as access to the rear entry. Three doorways, each historic, create three sections of the hallway. Changes to the original massing include a bathroom addition off the north side elevation and rear shed-roof additions. Also along the rear elevation is a side gable section with a roof that intersects the main body of the house in a north to south direction. The front screened porch is also a later addition but was likely added during the 1930s.

The windows along the house vary in type but are all generally historic. Types include the following: 3/1, 2/2, 6/6, and 9/1. The 9/1 windows are partially historic in that the 9-light section is the original window with the single light added. The 9/1 windows and those located along the front screened porch appear to be the original dimensions of the windows; the dimension of the 3/1 window along the

projecting front gable has been has been altered, reducing the overall length. Along the south elevation are multi-paned sliding glass windows in the area of the office and kitchen. The bay window is also an historic alteration.

Four brick chimneys are present and each retains the original Folk Victorian style fireplace surround. Other Folk Victorian elements include the interior door and window surrounds, as well as the fishtail shingles and decorative finial along the façade's projecting front gable. The wooden clapboards were covered at one point by historic asbestos shingle siding; the present occupants have worked to remove most of the shingle siding and exposed the original clapboards. The only area where the clapboards have not been exposed is along the front screened porch.

The house retains the characteristic floor plan of its typology with paired rooms along both sides of a central hallway. The changes that have occurred over time are also historic and illustrate the evolution of a house to reflect new stylistic trends and suit the needs of growing families. This property was evaluated for eligibility for listing in the NRHP under Criterion C. The property possesses a local level of significance in the area of architecture as a good example of a New South Cottage.

Because the historic boundary is no longer intact and because there are no other significant or character defining features within the legal boundary that contribute to the architectural significance of the property, the eligible NRHP boundary consists of a visual boundary. The eligible boundary contains all NRHP qualifying characteristics and features of the property and includes the house, associated outbuildings, and the immediate surrounds.

The ROW line along SR 54 has been proposed as the western border of the proposed boundary because the area within the existing ROW consists of a ditch and does not contain any landscaping or other features that contribute to the NRHP eligibility of this property.

Figure 12 – A.J. Mundy House

BLALOCK HOUSE

The Blalock House is located at 9550 SR 54 and is a 1948 two story house in the Neoclassical Revival style (refer to Figure 13). The house retains all of its original materials and architectural features and has been unaltered by any additions. Features such as the two story portico with triangular pediment, Corinthian columns and pilasters, dentils along the cornice, and the primary entrance surrounded by sidelights and transom with broken pediment are all elements of the Neoclassical Revival style. Among the many contributing landscape features, the Blalock House features scattered pine trees and a pond in the front yard. This property was evaluated for eligibility for listing in the NRHP under Criterion C. The property possesses a local level of significance in the area of architecture as an intact and unaltered example of a mid-twentieth century house constructed in the Neoclassical Revival style.

The eligible NRHP boundary of the property corresponds to the legal property boundary (Parcel 05211C A001). All significant and character defining features of the property are included within the legal boundary.

The edge of pavement along SR 54 has been proposed as the northern border of the proposed boundary because the area within the existing ROW contains a portion of the property's grassed lawn, which slopes upward towards the roadway. There is no discernible ditch existing along SR 54. This landscape feature is considered a contributing element of the setting of the eligible property.

Figure 13: Blalock House

CAMP HOUSE

The Camp House is located on the north side of Mundy's Mill Road southeast of SR 54 in Clayton County. The house is a circa 1992 U-shaped residence with a side and rear gabled metal roof, both raised seam and corrugated metal, and a brick pier foundation. The gables have gable returns and a frieze board. The resource has three exterior end chimneys. The front wing exhibits a central hall floor plan. The walls in this section are flush wood planks. Access to the remainder of the house was denied at the time. The Camp House is considered eligible for the NRHP under Criterion C for its architecture. It possesses a local level of significance.

The house is surrounded by trees and sits on 11 acres. Once surrounded by cultivated fields, the house currently retains open but uncultivated land around it. Since the historic boundary is no longer intact, the NRHP eligible boundary consists of 1.6 acres. A photograph of the resource is not available because it was not recently studied and none were found in the archives.

GILBERT FARM

The Gilbert Farm is located at 9579 and 9577 SR 54 and is comprised of two residential buildings and several agricultural and auxiliary buildings (refer to Figures 14 & 15). The Pyramidal Cottage features no academic style and consists of a single square mass with a partial width hipped-roof screened porch along the façade and a shed-roof addition along the rear elevation. The main body of the house is clad with wood shiplap siding while wood clapboards with a narrower profile are found along the rear addition. The screened front porch is accented with square wood columns and exposed rafters. The original windows are horizontal 2/2 types with a slight projection accenting the hood. Some of the windows have been replaced with wood 6/6 types that have also slightly altered the window openings, making them smaller. The house rests on stone foundation piers and concrete block infill. Four-pane, fixed sash windows were noted along each side of the addition.

The Pyramidal Cottage is situated along a dirt driveway that extends off SR 54 along the far eastern border of the legal boundary. The façade itself is oriented to the east so that the side (south) elevation is visible from the roadway. A narrow line of trees marks the division between the Gilbert Farm and a nonhistoric residential subdivision to the east. The dirt driveway continues north to the northern portion of the property. A grass lawn surrounds the house while the fields associated with the property extend northwest and west towards the Ranch House. To the southwest and west is a nonhistoric school and residential subdivision; the eligible Blalock House is to the southeast.

Located within a separate parcel but owned by the same family is the Ranch House. Located east of the Pyramidal Cottage and featuring no academic style, it exhibits typical Ranch characteristics in the cascading hip roof, red brick veneer siding, and elongated massing. The primary entrance is slightly recessed along a section that projects from the main body of the house. Metal support posts and railings further accent the entrance. Flanking the entrance are horizontal 2/2 wood windows and a multi-paned picture window. There are wide overhanging eaves and an exterior brick chimney along the rear elevation. The house is built along a slope so that the basement level, constructed of concrete block, is accessed along the rear elevation. The secondary entrance along this level is shielded by a metal awning and metal casement windows were also noted. The side porch has been enclosed and features vinyl siding, 1/1 window types and a secondary entrance leading to a set of brick steps.

The 1940 Pyramidal Cottage retains its characteristic square massing, a partial width hipped roof front porch, wood shiplap siding, and some of the original 2/2 window types. Alterations include a rear historic shed roof addition and replacement of some of the windows. The 1958 Ranch features characteristics of its building type in the cascading hipped roof, brick veneer siding, wide overhanging eaves and a recessed entry. It has been altered however by the enclosure of the side porch. The garage, pump house and agricultural buildings associated with the Ranch were all likely constructed at the same time as the house. This property was evaluated for eligibility for listing in the NRHP under Criteria A and C. The property possesses a local level of significance in the areas of architecture and agriculture as an intact example of a mid-twentieth century farm complex which retains its contributing agricultural outbuildings and terraced landscape. The outbuildings, along with the houses, represent good examples of their types, despite some material and structural alterations.

The eligible NRHP boundary of the property corresponds to the legal property boundary of Parcel 05205 212003 and a portion of Parcel 05205 212001, and contains a combined 120.0 acres. All significant and character defining features of the property are included within the legal boundary, including both houses, the outbuildings, and the contributing fields and landscape features.

The ROW line along SR 54 is the southern edge of the eligible boundary because the area within the ROW consists of a ditch and does not contain any landscape or other features that contribute to the NRHP eligibility of this resource.

Figure 14 – Gilbert Farm Pyramidal Cottage

Figure 15 – Gilbert Farm Ranch

JACKSON HOUSE

The Jackson House is a circa 1900 side gabled house located southeast of SR 54, approximately 600 feet off of the highway on Corinth Road in Fayette County. This house has a side extension in the rear which has been matched with an addition on the front façade. Based on the chimney and window placement, it appears to be a Georgian cottage. Architectural details include 8/8 windows on the front façade and 9/9 windows on the rear. The front entrance is trabeated; the front porch is covered in a shed roof which is supported by square columns. The house is supported on solid rock piers which have been filled in with cinder blocks. This resource is considered eligible for listing in the NRHP under Criterion C for its architecture. It possesses a local level of significance. A photograph of the resource is not available because it was not recently studied and none were found in the archives.

MUNDY HOUSE

The Mundy House is located at 8968 SR 54 and is a vernacular late nineteenth century house in an H-shaped plan (refer to Figure 13). The house is characterized by a front and rear gabled metal roof, clapboard siding, and a dropped shed roof front porch. The main entrance has sidelights and the gables have frieze boards, gable returns and gable vents. The façade features a second entrance. The windows are primarily 8/8 types. The house rests on a foundation consisting of rock piers with concrete block infill. This property was evaluated for eligibility for listing in the NRHP under Criterion C. The property possesses a local level of significance in the area of architecture as a good example of an H-plan house. The eligible NRHP boundary of the property corresponds to the legal property boundary (Parcel 05242DA 006). All significant and character defining features of the property are included within the legal boundary. The ROW line along SR 54 is the northern border of the proposed boundary because the area within the ROW consists of a ditch and does not contain any landscape or other features that contribute to the NRHP eligibility of this property.

Figure 16 – The Mundy House

WALLACE HOUSE

The Wallace House is located at 8943 SR 54 and is a 1948 American Small House (refer to Figure 17). The house retains the characteristic compact massing and its original materials, such as the asbestos shingle siding, an entrance covered by a front gable portico, 6/6 windows, exposed rafters and an off-center ridge line chimney. The house itself is surrounded by foundation shrubberies, planting beds and mature magnolia trees alongside the driveway. This property was evaluated for eligibility for listing in the NRHP under Criterion C. The property possesses a local level of significance in the area of architecture as an intact and unaltered example of a mid-twentieth century American Small House that retains its original materials. The eligible NRHP boundary of the property corresponds to the legal property boundary (Parcel 05242DB 004). All significant and character defining features of the property are included within the legal boundary. The ROW line along SR 54 is the southern border of the eligible boundary because the area within the ROW consists of a ditch and does not contain any landscape or other features that contribute to the NRHP eligibility of this property.

Figure 17 – The Wallace House

Assessment of Effects

Direct Effects

The SHPO has concurred with the determination that the proposed project would have a no adverse effect to the A.J. Mundy House, the Blalock House, the Camp House, the Gilbert Farm, the Jackson House, and the Wallace House. Similarly, SHPO concurred with the determination that the proposed project would have an adverse effect to the Mundy House. The Assessment of Effects (AOE) and associated Memorandum of Agreement (MOA) were transmitted to the FHWA and the SHPO on January 9, 2008, and the SHPO concurred with the determination on March 26, 2008 (see History Correspondence in Appendix B).

A.J. MUNDY HOUSE

A finding of No Adverse Effect is anticipated for the A.J. Mundy House. In the area of the resource, project implementation would consist of widening SR 54 from two lanes to four lanes, construction of sidewalks, and relocation of the drainage system (See Figures 15a – 15h).

Physical destruction of or damage to all or part of the property would not occur. No activity is proposed within the eligible boundary of the resource as all activity would occur outside of the eligible boundary and along the west side of SR 54.

Project implementation would not result in a change in the character of the property's use. There are no direct or indirect effects anticipated to the A.J. Mundy House that would alter the character of the continued residential use of the property. Although SR 54 would be widened in front of the resource, there would be little change to the set-back of the A.J. Mundy House and its residential front yard would be maintained. Therefore, project implementation would not result in a change in the character of the property's use.

Project implementation would not result in a change in the character of the property's physical features within the property's setting that contribute to its historic significance. Because there would be no construction activity within the eligible boundary of the A.J. Mundy House, no features that contribute to

the eligibility of the resource would be altered or destroyed. The mature magnolia tree just west of the façade of the house would not be impacted as it is well removed from the construction activity along SR 54. Project implementation would remove the set of steps along the roadway and the slight realignment of a portion of the resource's driveway. However, these features are not considered contributing elements and thus, the effect on these elements would not adversely affect the A.J. Mundy House.

Project implementation would not result in the introduction of visual elements that diminish the integrity of the property's significant historic characteristics or features. The existing roadway always has been and would continue to be an element of the visual character of the property. In addition, while the distance from the property to the roadway would change, the difference is very slight. Currently the house is located approximately 79 feet from the existing edge of pavement; following project implementation the distance would be approximately 77 feet. Therefore, the visual perception from the property would not change. The actual widening of the roadway would not adversely affect the visual setting since the visual character of the area surrounding the resource has been compromised by a large modern residential development across from the resource, as well as modern developments to the north, south, and east of the house.

Project implementation would not result in the introduction of atmospheric elements that diminish the integrity of the property's significant historic characteristics or features. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Project implementation would audibly affect the A.J. Mundy House; however this effect is not considered adverse. The existing noise level at the property is 67 dBA Leq. The no-build noise level at the property is 71 dBA Leq. The build noise level (design year 2033) at the resource is 69 dBA Leq. Although the existing and build noise levels exceed the FHWA noise abatement criterion of 67 dBA Leq

established for residential land use, this two decibel increase would occur over twenty years and would not be perceptible to the human ear and therefore would not adversely affect the resource.

Project implementation is not anticipated to affect indirectly the A.J. Mundy House. No change in traffic patterns would result from project implementation. No additional access to the existing transportation facility would be provided and no existing access to the facility would be removed. The proposed project would only increase the capacity of the existing roadway to meet current and anticipated future demand.


54
© 2009 Europa Technologies
ELIGIBLE NATIONAL REGISTER BOUNDARY
A.J. MUNDY HOUSE
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County
and
Fayette County
STP-164-1(29)
P.I. #721440
N

Figure 18a

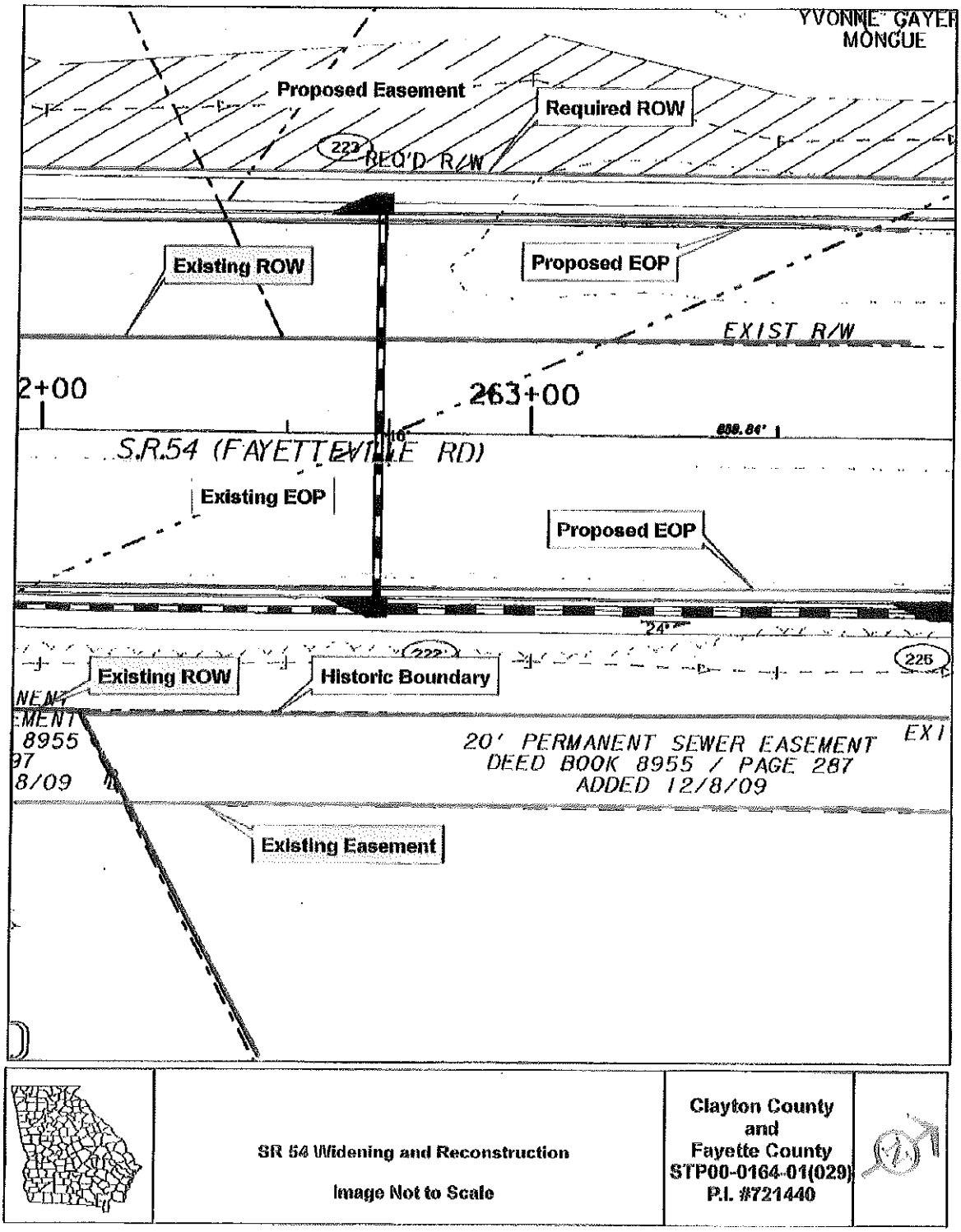


Figure 18b – Proposed Improvements in the Area of the A.J. Mundy House (1)

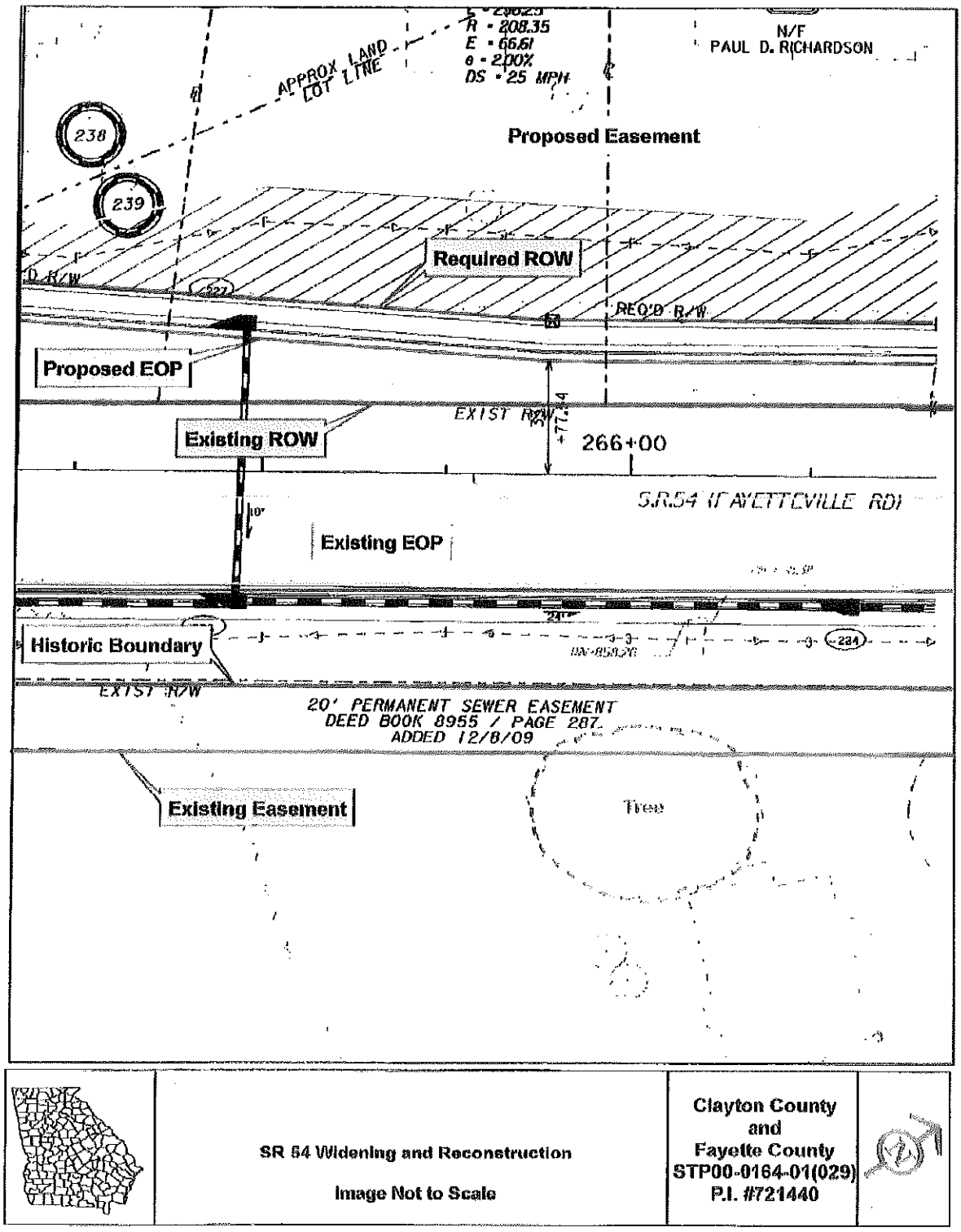


Figure 18c – Proposed Improvements in the Area of the A.J. Mundy House (2)

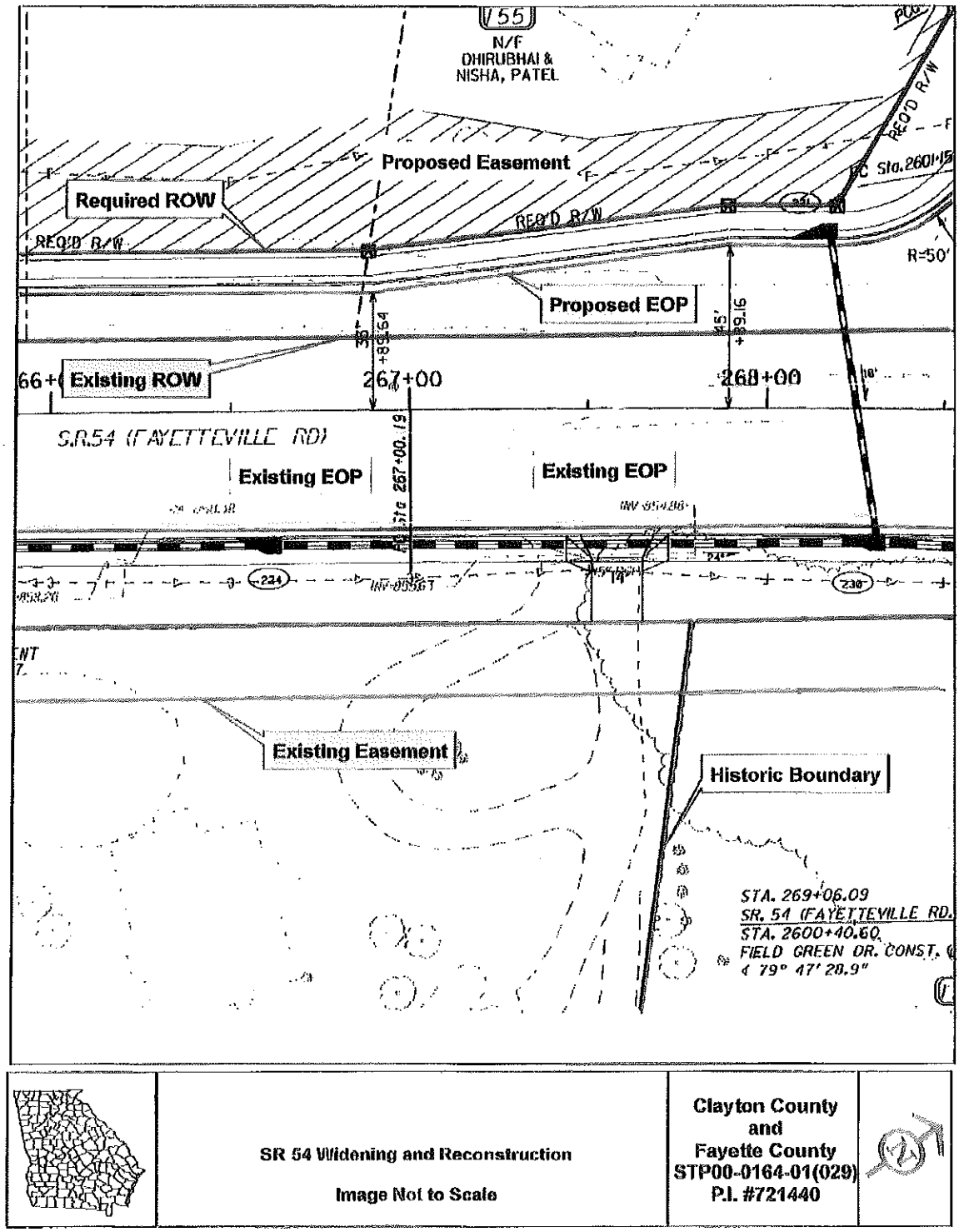


Figure 18d – Proposed Improvements in the Area of the A.J. Mundy House (3)

BLALOCK HOUSE

A finding of No Adverse Effect has been determined for the Blalock House. In the area of the resource, project implementation would consist of the widening and reconstruction of SR 54 from two lanes to four lanes with a 24-foot raised median, construction of a 5-foot sidewalk along both sides of the improved roadway, as well as the acquisition of ROW and cut and fill activity within the historic boundary of the resource (See Figures 19a – 19c).

Physical destruction of or damage to all or part of the property would occur; however, this effect is not considered adverse because only a small percentage of the overall property would be affected by the proposed project and no contributing features would be altered or destroyed. Approximately 70 feet of ROW would be acquired from within the historic boundary. In addition, the edge of pavement would move approximately 60 feet closer to the house. Finally, the proposed project would construct a 5-foot sidewalk along SR 54 within the historic boundary of the Blalock House. However, the area within which this construction activity would occur consists of a portion of the property's grassed lawn and three of the approximately 25 pine trees which are located in the resource's front lawn.

The proposed construction is also required within the historic boundary in order to allow for a break in the median for turning movements along SR 54. This would result in the widening of the roadway to extend far enough into the boundary to result in the loss of three pine trees. The front yard of the Blalock House is currently characterized by scattered pine trees to the east of the driveway, between the house and roadway. Although three of these trees would be removed, these trees are those located closest to the roadway. Also, approximately 22 pine trees would remain to continue to act as a buffer between the house and improved roadway. Also, aerial photography from 1949, the same year the house was constructed shows that the front yard was clear of any sort of vegetation. Aerial photography from 1958 illustrates the presence of some vegetation; however, the coverage is not to the extent as illustrated on

current aerials. Therefore, it appears that while some vegetation has just become historically associated with the resource, much of the vegetation that exists now is not historic.

The fill activity associated with the proposed project would extend along the north edge of the pond. However, project implementation would not result in any changes that would alter the physical formation or continuation of the pond as a feature of the landscape.

Project implementation would not result in a change in the character of the property's use. There are no direct or indirect effects anticipated to the Blalock House that would alter the character of the continued residential use of the property. Although some of the setback of the property would be reduced by the widening of SR 54, the Blalock House would remain approximately 350 feet from the improved roadway and would retain the majority of the landscaping that contributes to the property. Therefore, project implementation would not result in a change in the character of the property's use.

Although project implementation would result in a change in the character of the property's physical features within the property's setting, the effect is not considered adverse. A small grouping, consisting of three pine trees near SR 54, would be removed as a result of project implementation. However, the proposed widening would not alter the physical formation of the pond nor affect the majority of the landscaping that comprises the front yard of the property.

Project implementation would not result in the introduction of visual elements that diminish the integrity of the property's significant historic characteristics or features. State Route 54 has been and would continue to be an element of the visual character of the property. Currently, the edge of pavement is located approximately 410 feet from the house; after implementation of the project, the edge of pavement would be located approximately 350 feet. So although the setback would be reduced and the widening would result in the removal of three pine trees, project implementation would not result in adverse visual effects. The Blalock House would retain much of the property's front yard and approximately 22 trees that serve as a buffer between the house and roadway. The introduction of the proposed sidewalk would

not visually affect the Blalock House as the surrounding area has already been significantly altered by the numerous nonhistoric residential and institutional properties along SR 54. Within the immediate vicinity of the resource is a modern residential subdivision to the north across from the property, as well as a nonhistoric school and institutional property to the east and west, respectively. Other nonhistoric residential properties are located further to the east and west of the resource. Therefore, the enlargement of the existing transportation facility would not compromise the visual character of the property.

Project implementation would not result in the introduction of atmospheric elements that diminish the integrity of the property's significant historic characteristics or features. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Project implementation would not audibly affect the Blalock House. The existing noise level at the property is 59 dBA Leq. The no-build noise level at the property is 61 dBA Leq. The build noise level (design year 2033) at the resource is 61 dBA Leq. This two decibel increase would occur over twenty years and would not be perceptible to the human ear. Also, the build noise level would not approach or exceed the FHWA noise abatement criterion of 67 dBA Leq established for residential land use.

Project implementation is not anticipated to indirectly affect the Blalock House. No change in traffic patterns would result from project implementation. No additional access to the existing transportation facility would be provided and no existing access to the facility would be removed. The proposed project would only increase the capacity of the existing roadway to meet current and anticipated future demand.

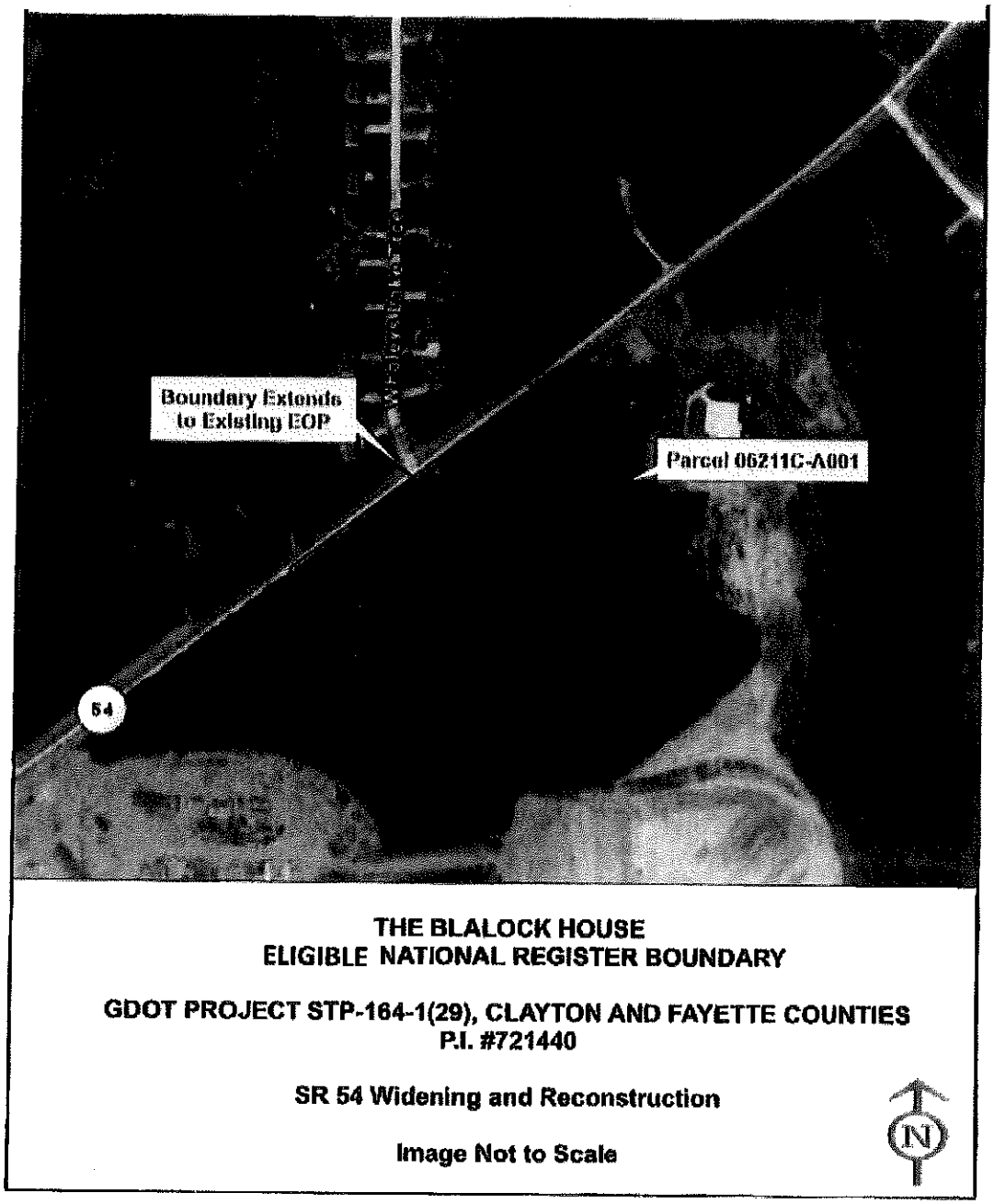

Boundary Extends to Existing EOP
Parcel 06211C-A001
54
THE BLALOCK HOUSE
ELIGIBLE NATIONAL REGISTER BOUNDARY
GDOT PROJECT STP-164-1(29), CLAYTON AND FAYETTE COUNTIES
P.I. #721440
SR 54 Widening and Reconstruction
Image Not to Scale
N

Figure 19a

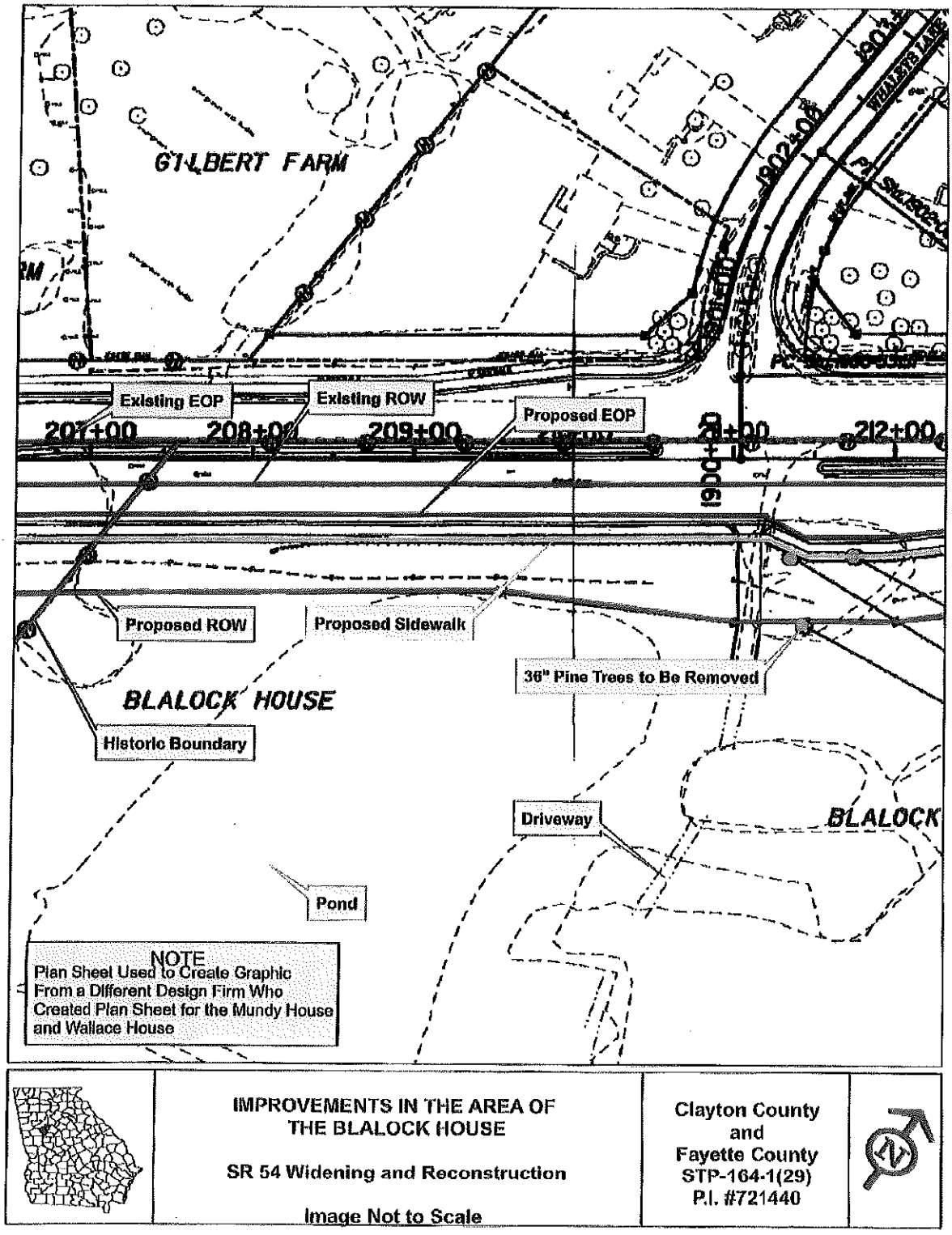

GILBERT FARM
Existing EOP
Existing ROW
Proposed EOP
207+00
208+00
209+00
211+00
212+00
Proposed ROW
Proposed Sidewalk
36" Pine Trees to Be Removed
BLALOCK HOUSE
Historic Boundary
Driveway
BLALOCK
Pond
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Mundy House and Wallace House
IMPROVEMENTS IN THE AREA OF THE BLALOCK HOUSE
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 19b

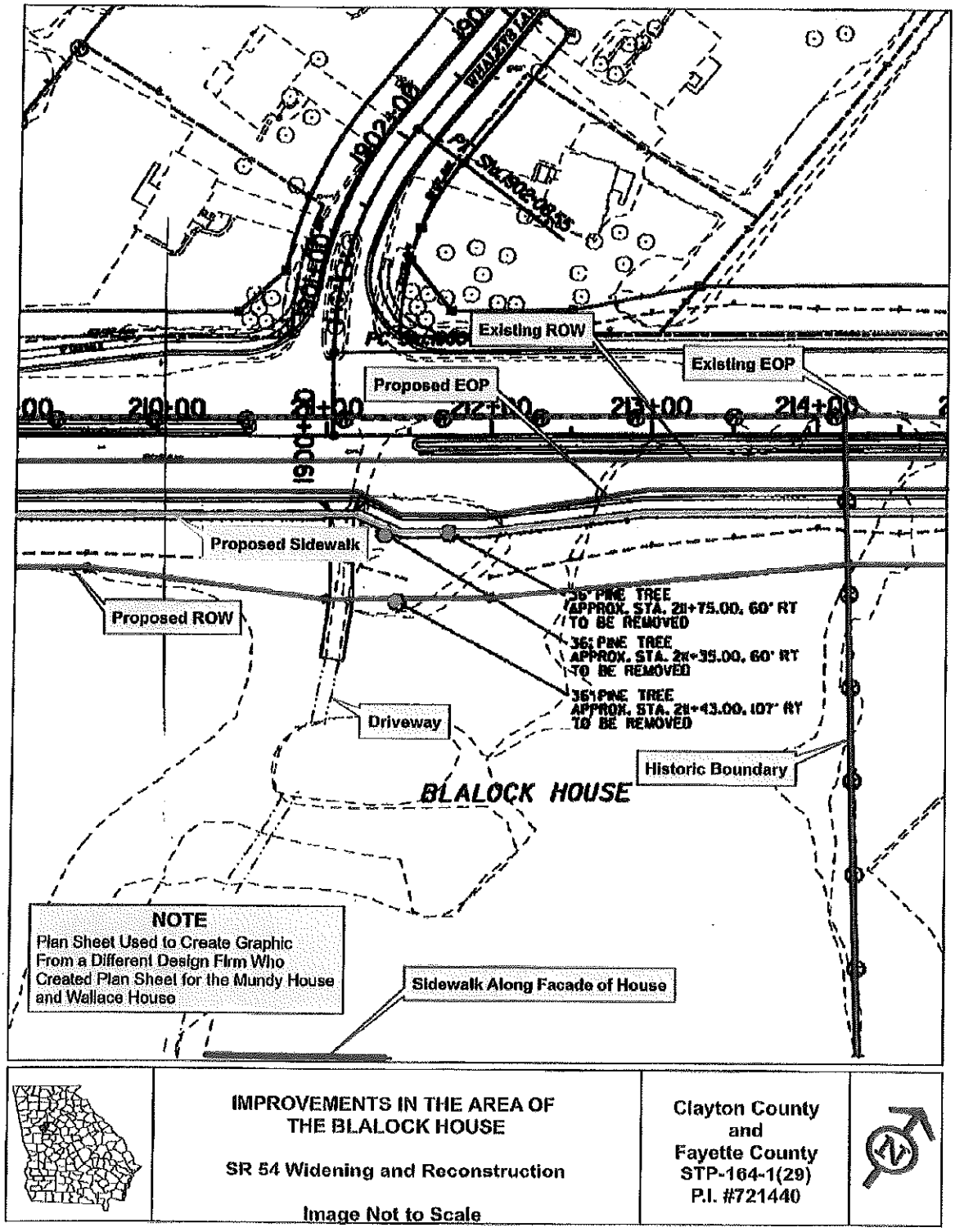

Existing ROW
Existing EOP
Proposed EOP
Proposed Sidewalk
Proposed ROW
36" PINE TREE
APPROX. STA. 211+75.00, 60' RT
TO BE REMOVED
36" PINE TREE
APPROX. STA. 211+95.00, 60' RT
TO BE REMOVED
36" PINE TREE
APPROX. STA. 211+43.00, 107' RT
TO BE REMOVED
Driveway
Historic Boundary
BLALOCK HOUSE
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Mundy House and Wallace House
Sidewalk Along Facade of House
IMPROVEMENTS IN THE AREA OF THE BLALOCK HOUSE
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 19c

CAMP HOUSE

A finding of No Adverse has been determined for the Camp House (see Figure 27). In the area of the resource, project implementation would consist of the widening and reconstruction of SR 54 from two lanes to four lanes with a 24-foot raised median, and construction of a 5-foot sidewalk along both sides of the improved roadway. A median break and turn lanes would be provided at Mundy's Mill Road.

Physical destruction, damage or alteration of all or part of the property would not occur. All ROW acquisition and construction would occur outside of the eligible NRHP boundary of this resource.

The character of the setting of the Camp House outside the eligible NRHP boundary consists of intense and rapid residential development in the form of subdivisions. The original rural and agricultural setting is no longer present and thus the current setting is not a NRHP qualifying characteristic of this resource. Project implementation, the widening of SR 54 from two to four lanes with a median, would alter the character of this setting. However, this effect is not considered to be adverse since a four lane roadway is in keeping with the heavy development occurring in this area.

The character of the setting of the Camp House within the eligible NRHP boundary consists of the house on an informally landscaped tract. The house is surrounded by trees, though it has little in the way of a yard as automobiles occupy much of this open space. Project implementation would not alter the character of the setting of this resource within the eligible NRHP boundary since all ROW acquisition and construction would occur outside of it.

The Camp House would not be isolated from the character of its setting as existing access off of Mundy's Mill Road would be maintained.

Project implementation would visually affect the Camp House. However, the effect is not considered adverse. The resource is currently 280 feet from the existing edge of pavement of SR 54 and 250 feet from the existing ROW. The resource is located 185 feet from the existing pavement of Mundy's

Mill Road and SR 54, though a scattering of trees partially shields the resource from the intersection. A modern church is located opposite SR 54 in this area. Following project implementation, the Camp House would be 220 feet from the proposed edge of pavement of SR 54 and 170 feet from the proposed ROW on SR 54. The distance between the resource and Mundy's Mill Road would remain the same.

Project implementation would not introduce elements which are adversely out of character with the resource visually since in spite of the movement of the highway 60 feet closer to the resouce, the house would continue to be several hundred feet from SR 54. Also, this highway has long been an element of the visual setting of this resource and the historic visual character of the house already has been compromised by intrusions.

The Camp House would be affected audibly as a result of project implementation. As the noise study for this resource was last done in 1997 using an older noise model and measuring standards, the unit of measurement (L10) differs from that used on the resources studied in later years (Leq). The studies will be updated to account for the design year , 2033, and documented in the Final Environmental Assessment. The existing noise level at the resource is 59 dBA L10. The no-build noise level at the resource is 62 dBA L10. The build noise level for 2017 at the resource is 63 dBA L10. The build noise level would not approach or exceed the FHWA noise abatement criterion of 70 dBA L10 established for residential land use.

There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

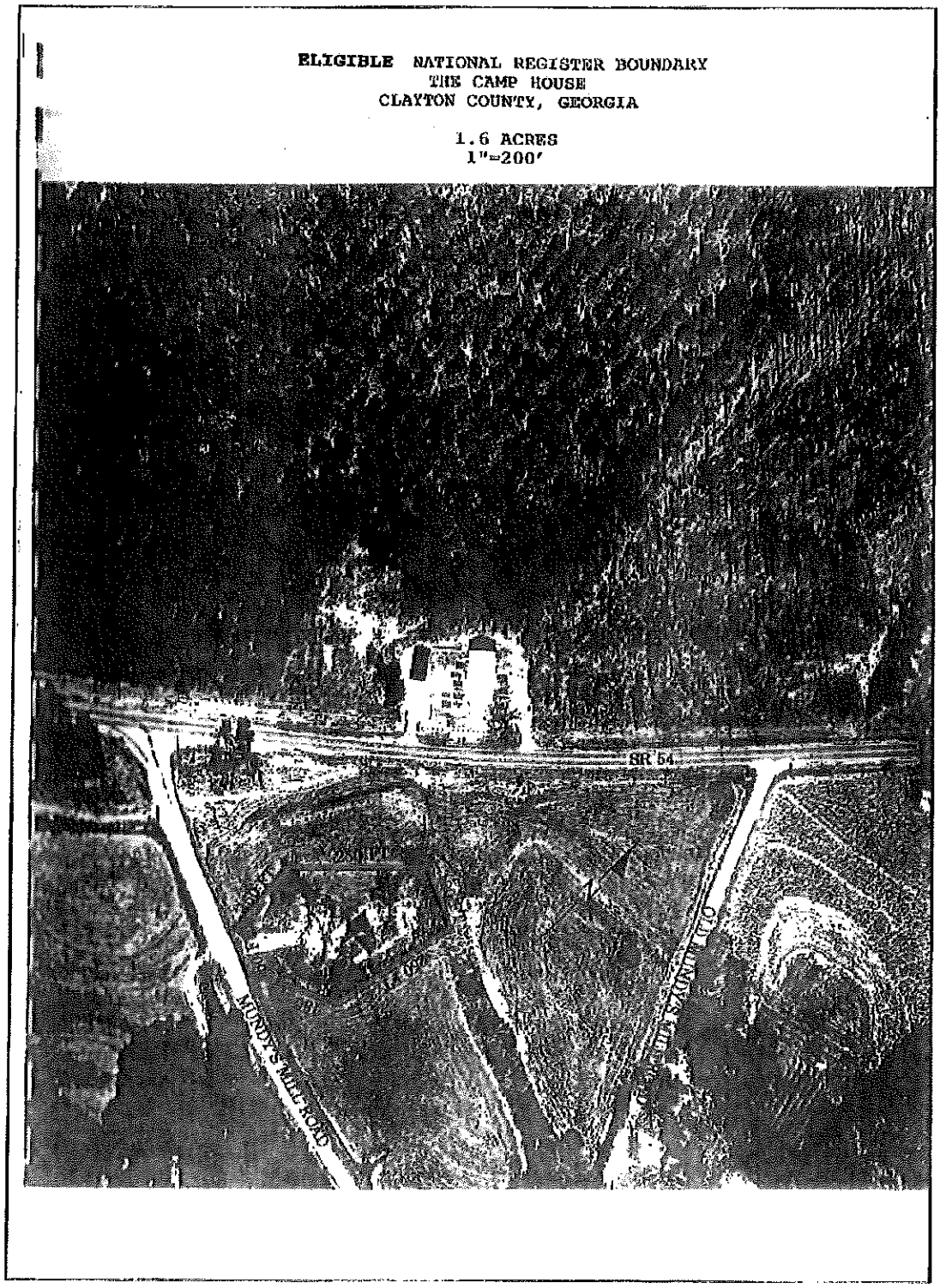

ELIGIBLE NATIONAL REGISTER BOUNDARY
THE CAMP HOUSE
CLAYTON COUNTY, GEORGIA
1.6 ACRES
1"=200'
SR 54
MUNDY'S MILL ROAD
CLAYTON CO.
FAYETTE CO.

Figure 20

GILBERT FARM

A finding of No Adverse Effect has been determined for the Gilbert Farm. In the area of the resource, project implementation would consist of the widening and reconstruction of SR 54 from two lanes to four lanes with a 24-foot raised median, construction of a 5-foot sidewalk along both sides of the improved roadway, and a center turn lane for access to the Whaley's Lake subdivision (See Figure 21a – 21c).

Physical destruction of or damage to all or part of the property would not occur. There would be no acquisition of ROW from within the eligible boundary of the resource. The proposed edge of pavement would only move less than five feet closer to the Pyramidal Cottage but this change occurs outside the historic boundary and would only slightly affect the setback of this house. The proposed sidewalk would be constructed within the current ROW and no features that contribute to the eligibility of the resource would be altered or destroyed as a result of the implementation of the project. The vegetation that currently extends along the front of the Ranch house would not be impacted by the proposed project.

Project implementation would not result in a change in the character of the property's use. There are no direct or indirect effects anticipated to the Gilbert Farm that would alter the character of the continued agricultural or residential use of the property. There would be no acquisition of ROW from within the boundary and the edge of pavement would only move slightly closer to the Pyramidal Cottage. Even though historically the property had been used as a farm, the property is no longer used for agricultural purposes. The two houses associated with the resource however continue to be used for residential purposes. As such, the potential for the Gilbert Farm to return to agricultural use, or continue to be used for residential purposes would not be diminished by the implementation of the proposed project. Therefore, project implementation would not result in a change in the character of the property's use.

Project implementation would not result in a change in the character of the property's physical features within the property's setting that contribute to its historic significance. The construction of the

sidewalk and the slight change to the edge of pavement would not affect any feature that contributes to the eligibility of the Gilbert Farm. All construction activity associated with the proposed project would occur outside the eligible boundary.

Project implementation would not result in the introduction of visual elements that diminish the integrity of the property's significant historic characteristics or features. State Route 54 has been and would continue to be an element of the visual character of the property; however, the distance between the Pyramidal Cottage and the edge of pavement would decrease by a few feet while no change to the edge of pavement would occur in front of the Ranch House. The introduction of the proposed sidewalk would not visually affect the Gilbert Farm as the surrounding area has already been significantly altered by the presence of numerous nonhistoric residential and institutional properties along SR 54, including a residential development along the east border of the resource and clearly visible from the Pyramidal Cottage. Within the immediate vicinity of the Gilbert Farm is a modern residential subdivision immediately east of the Pyramidal Cottage, a nonhistoric school to the southwest and a nonhistoric institutional property to the southwest. Other nonhistoric residential properties are located further to the east and west of the resource. Project implementation would not alter or remove any contributing landscape features, nor would project implementation result in any realignment of the existing driveways. Therefore, the enlargement of the existing transportation facility would not compromise the visual character of the property.

Project implementation would not result in the introduction of atmospheric elements that diminish the integrity of the property's significant historic characteristics or features. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Project implementation would not audibly affect the Gilbert Farm. The existing noise level at the property is 65 dBA Leq (noise levels were measured from the Ranch house as it is the closest house to the

roadway). The no-build noise level at the property is 68 dBA Leq. The build noise level (design year 2033) at the resource is 68 dBA Leq. Although the build noise level would exceed the FHWA noise abatement criterion of 67 dBA Leq established for residential land use, this three decibel increase would occur over twenty years and would not be perceptible to the human ear.

Project implementation is not anticipated to indirectly affect the Gilbert Farm. No change in traffic patterns would result from project implementation. No additional access to the existing transportation facility would be provided and no existing access to the facility would be removed. The proposed project would only increase the capacity of the existing roadway to meet current and anticipated future demand.

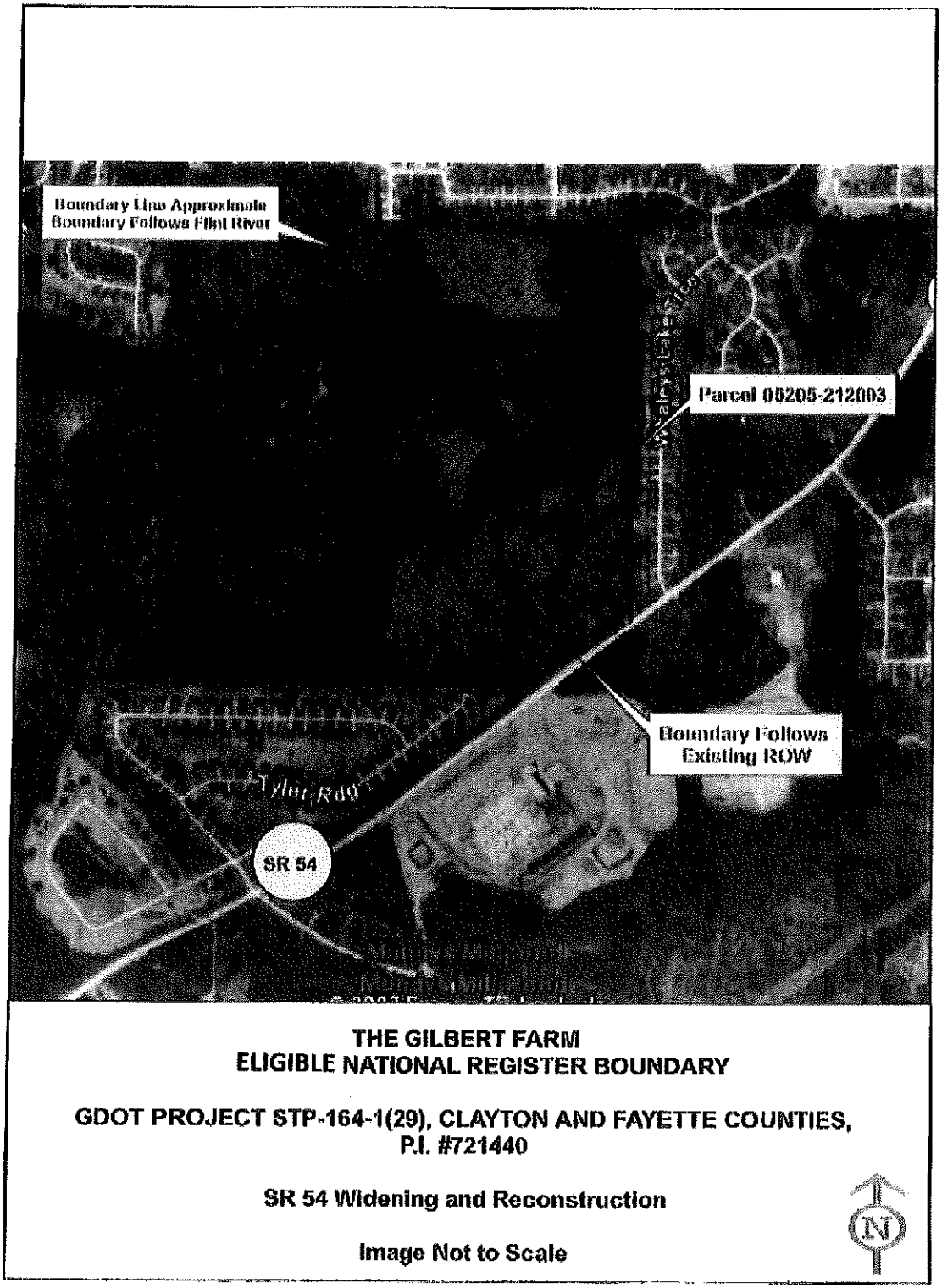

Boundary Line Approximate Boundary Follows Flint River
Parcel 05205-212003
Boundary Follows Existing ROW
Tyler Rd
SR 54
THE GILBERT FARM
ELIGIBLE NATIONAL REGISTER BOUNDARY
GDOT PROJECT STP-164-1(29), CLAYTON AND FAYETTE COUNTIES, P.I. #721440
SR 54 Widening and Reconstruction
Image Not to Scale
N

Figure 21a

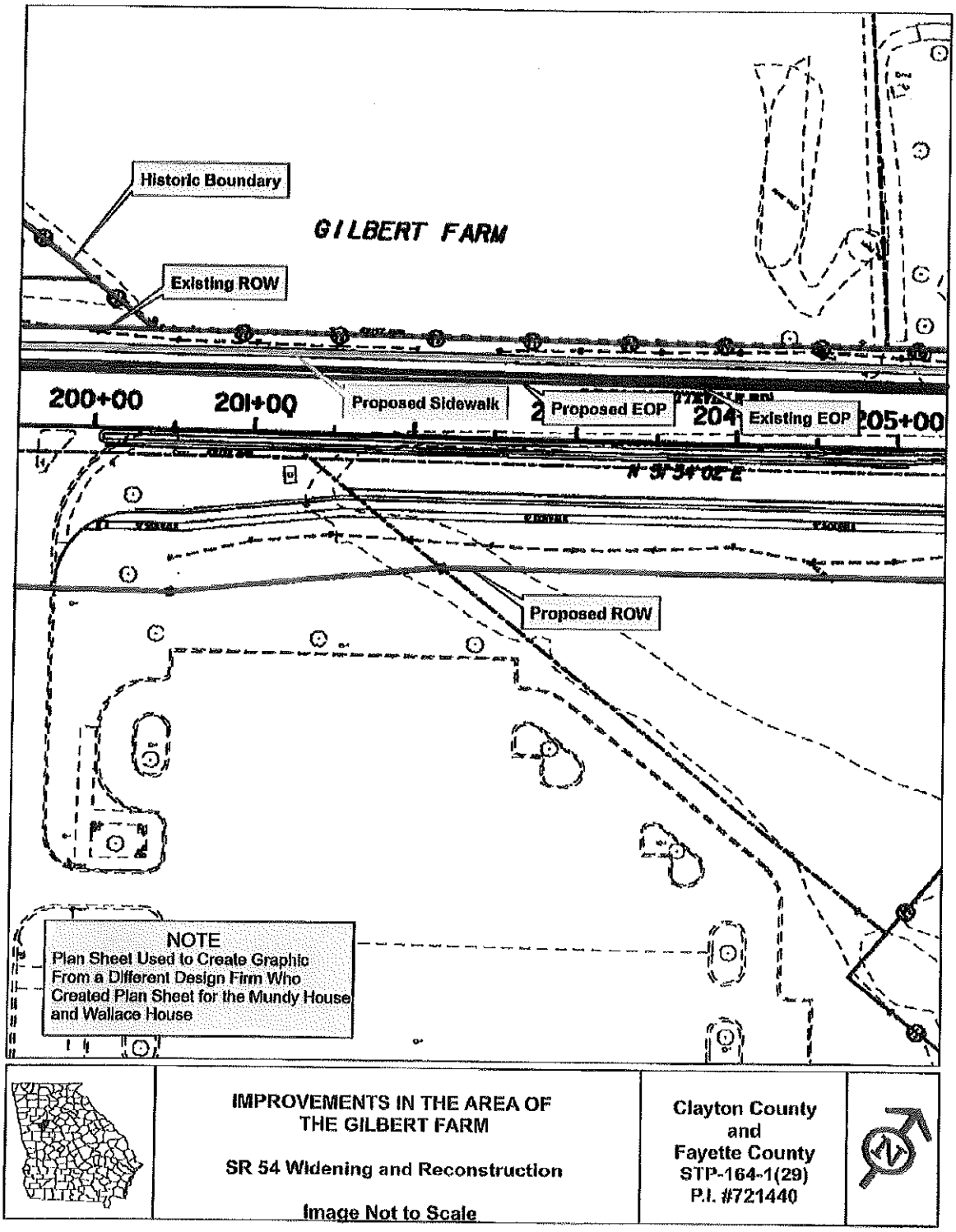

Historic Boundary
GILBERT FARM
Existing ROW
200+00
201+00
Proposed Sidewalk
Proposed EOP
204
Existing EOP
205+00
Proposed ROW
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Mundy House and Wallace House
IMPROVEMENTS IN THE AREA OF THE GILBERT FARM
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 21b

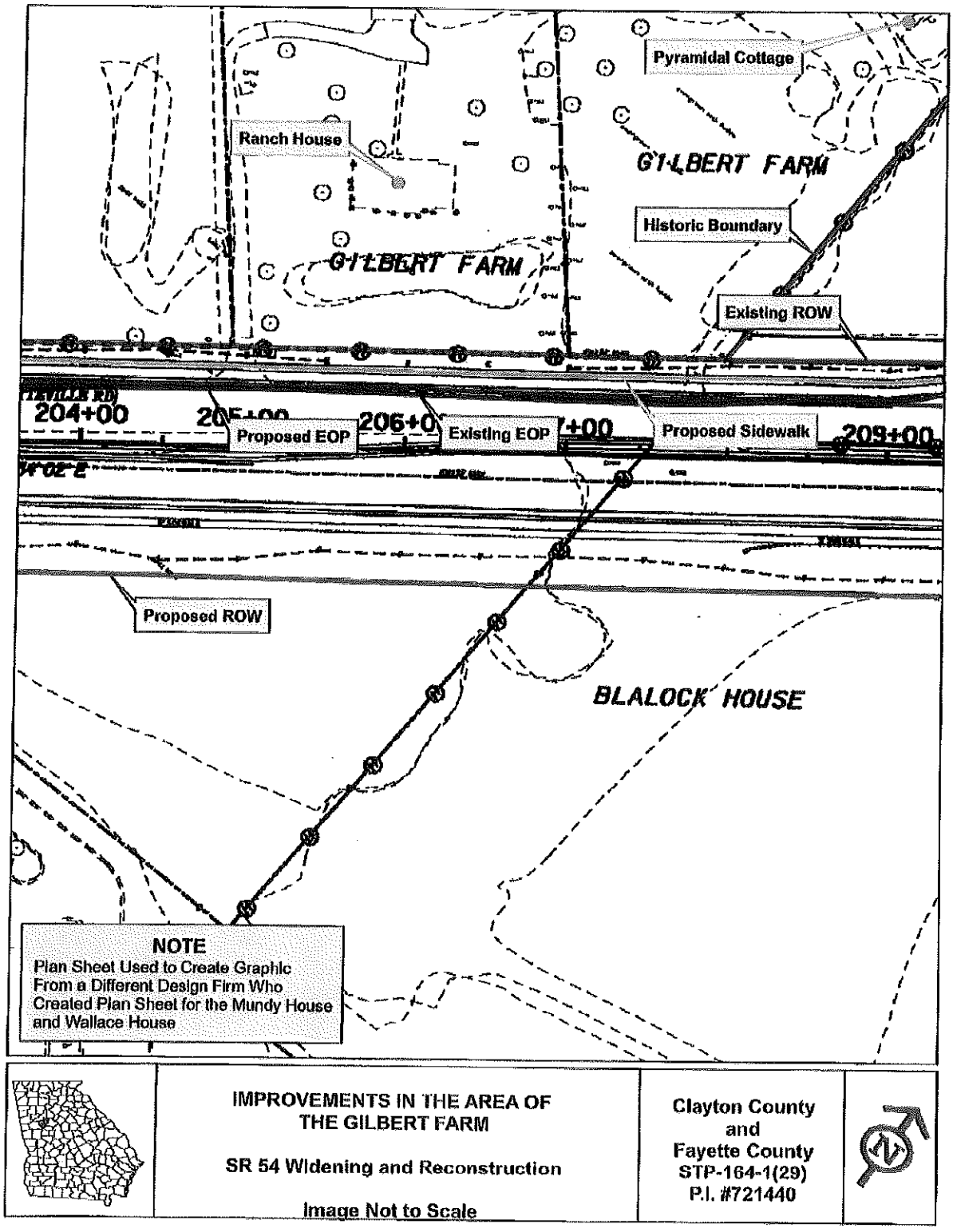

Pyramidal Cottage
Ranch House
GILBERT FARM
Historic Boundary
GILBERT FARM
Existing ROW
204+00
Proposed EOP
206+0
Existing EOP
Proposed Sidewalk
209+00
Proposed ROW
BLALOCK HOUSE
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Mundy House and Wallace House
IMPROVEMENTS IN THE AREA OF THE GILBERT FARM
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 21c

JACKSON HOUSE

A finding of No Adverse Effect has been determined for the Jackson House (see Figure 22). In the area of the resource, the existing facility would be widened from two lanes to four 12-foot lanes with a 44-foot median and 10-foot shoulders. A median break and turn lanes would be provided at Corinth Road. Physical destruction, damage or alteration of all or part of the property would not occur. All ROW acquisition and construction would occur outside of the eligible NRHP boundary of the resource.

The character of the setting of the Jackson House outside the eligible NRHP boundary consists of intense and rapid residential development in the form of subdivisions. The original rural and agricultural setting is no longer present and thus the current setting is not a NRHP qualifying characteristic of this resource. Project implementation, the widening of SR 54 from two to four lanes with a median, would alter the character of this setting. However, this effect is not considered to be adverse since a four lane roadway is in keeping with the heavy development occurring in this area.

The character of the setting of the Jackson House within the eligible NRHP boundary consists of the house, a barn, a well shed and a storage shed on an informally landscaped tract. The domestic landscape includes a number of mature hardwood trees. Project implementation would not alter the character of the setting of this resource within the eligible NRHP boundary since all ROW acquisition and construction would occur outside of it.

The Jackson would not be isolated from the character of its setting as existing access of Corinth Road would be maintained.

Project implementation would visually affect the Jackson House. However, the effect is not considered adverse. The resource is currently 600 feet from the existing edge of pavement and 570 feet from the existing ROW. The back of the resource faces SR 54, though a scattering of trees as well as an outbuilding and a newer concrete block residence partially shield the resource from the highway. Since the proposed widening would occur on the northwest side of SR 54, these distances would remain the same.

Project implementation would not introduce elements which are adversely out of character with the resource visually since the resource would continue to be 600 feet from the roadway. Also, this highway has long been an element of the visual setting of this resource and the historic visual character of the house already has been compromised by intrusions.

The Jackson House would not be affected audibly as a result of the project implementation. As with the Camp House, the noise study for this resource was last done in 1997 using an older noise model and measuring standards, the unit of measurement(L10) differs from that used on the resources studied in later years (Leq). The studies will be updated to account for the design year 2033. The existing noise level at the resource is 55 dBA L10. The no-build noise level at the resource is 58 dBA L10. The 2017 build noise level at the resource is 57 dBA L10. The two decibel increase would not be perceptible to the human ear and the build noise level would not approach or exceed the FHWA noise abatement criterion of 70 dBA L10 established for residential land use. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Figure 22 – The Jackson House Boundary

MUNDY HOUSE

A finding of Adverse Effect has been determined for the Mundy House. In the area of the resource, project implementation would consist of the widening and reconstruction of SR 54 from two lanes to four 11-foot lanes with a 14-foot flush median, construction of a 5-foot sidewalk and bike lanes along both sides of the improved roadway, as well as the acquisition of ROW, a retaining wall along the east side of the roadway, and fill activity within the historic boundary of the resource (See Figure 23a and 23b).

Physical destruction of or damage to all or part of the property would occur; this effect is considered adverse. Approximately 18 feet of ROW would be acquired from within the historic boundary along SR 54. Currently, the façade of the house is situated approximately 108 feet from the existing ROW; following project implementation, ROW would be located approximately 90 feet from the house. The setback of the house would also be adversely affected. The edge of pavement is currently located approximately 135 feet from the house; following project implementation, the edge of pavement would be approximately 105 feet from the house.

Further affecting the Mundy House would be the loss of several contributing features. The driveway to the property extends in an uphill direction, following SR 54 in a parallel manner. In order to correct the current skewed intersection of the driveway and SR 54, the driveway would be relocated towards the center of the domestic yard and would intersect SR 54 at a 90-degree angle. Lining one side of the driveway is an historic rock retaining wall that would be removed as a result of the implementation of the project. The widening of SR 54 and proposed cut activity would also result in the loss of the vegetation that currently screens the Mundy House from the roadway. The loss of the historic entrance to the property, the rock retaining wall, and the vegetation would result in an adverse effect to the Mundy House.

Project implementation would not result in a change in the character of the property's use. There are no direct or indirect effects anticipated to the Mundy House that would alter the character of the residential use of the property. Even though the Mundy House is currently vacant and the property has been zoned for low density residential development, the efforts to minimize harm to the resource have resulted in preserving more of the setback than what was originally proposed. Originally, the proposed project would have reduced the setback of the Mundy House by almost half, moving the proposed edge of pavement to when approximately 50 feet of the façade, greatly reducing the desirability of this house to return to its historic use. But because the edge of pavement would only move approximately 30 feet closer and the amount of required ROW was reduced from 60 to 68 feet to the proposed 18 feet, there is a potential for the house to return to residential use. Therefore, project implementation would not result in a change in the character of the property's use.

Project implementation would result in a change in the character of the property's physical features within the property's setting that contribute to its historic significance. The proposed widening would result in the edge of pavement moving 50 feet closer to the house, resulting in a loss of almost half of the current setback. Also, project implementation would remove several contributing features, including the historic entrance onto the property which is lined with a rock retaining wall, and the vegetation that currently screens the house from SR 54.

Project implementation would result in the introduction of visual elements that diminish the integrity of the property's significant historic characteristics or features. Project implementation would visually alter the setting within the eligible boundary by removing or altering several contributing features. The remnants of a stone retaining wall which lines one side of the driveway would be removed. In addition, the driveway itself would be relocated from its current alignment to one that would intersect SR 54 at a 90-degree angle in the center of the domestic yard. Even though the existing roadway has been and would continue to be a part of the visual setting of the Mundy House, and the surrounding area has been altered by modern developments, the implementation of the project would result in the loss of the

vegetated buffer which currently shields the house from the roadway. The improved roadway would thus be more visible from the house. In addition, project implementation would require the construction of a retaining wall along SR 54, approximately where the current ROW is located. This wall would be located to the east of the proposed driveway and would extend approximately 55 feet eastward along SR 54 and would be faced with rubble masonry. Although the treatment of the surface would assist in visually blending the wall into the setting, it would however introduce a feature into the setting that would adversely affect the Mundy House.

Project implementation would not result in the introduction of atmospheric elements that diminish the integrity of the property's significant historic characteristics or features. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Project implementation would audibly affect the Mundy House; however, this effect would not be adverse. The existing noise level at the property is 64 dBA Leq. The no-build noise level at the property is 68 dBA Leq. The build noise level (design year 2033) at the resource is 68 dBA Leq. This four decibel increase would occur over twenty years and would be perceptible to the human ear, but would not be substantial. The build noise level would exceed the FHWA noise abatement criterion of 67 dBA Leq established for residential land use, but since the decibel increase is not substantial, the project will not result in an adverse audible effect.

Project implementation is not anticipated to indirectly affect the Mundy House. No change in traffic patterns would result from project implementation. No additional access to the existing transportation facility would be provided and no existing access to the facility would be removed. The proposed project would only increase the capacity of the existing roadway to meet current and anticipated future demand.


ELIGIBLE NATIONAL REGISTER BOUNDARY
THE MUNDY HOUSE
CLAYTON COUNTY, GEORGIA
10.5 ACRES
1"=200'
TOWNGATE BLVD
630.9 FT
920.2 FT
SR 54

Figure 23a

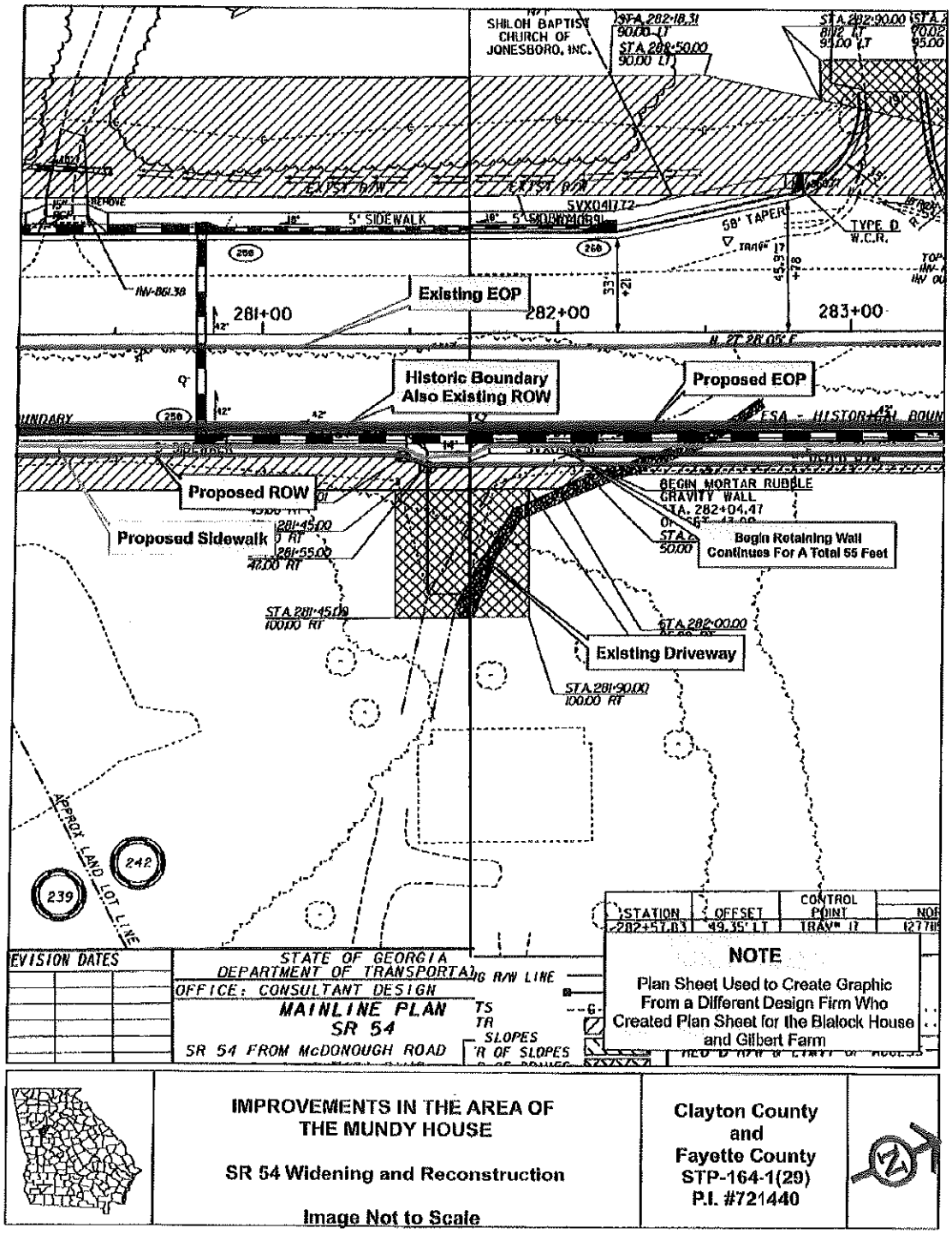

SHILOH BAPTIST CHURCH OF JONESBORO, INC.
Existing EOP
Historic Boundary Also Existing ROW
Proposed EOP
Proposed ROW
Proposed Sidewalk
Begin Retaining Wall Continues For A Total 55 Feet
Existing Driveway
281+00
282+00
283+00
APPROX. LAND LOT LINE
239
242
STATION
OFFSET
CONTROL POINT
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Blalock House and Gilbert Farm
REVISION DATES
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN
MAINLINE PLAN
SR 54
SR 54 FROM McDONOUGH ROAD
IMPROVEMENTS IN THE AREA OF THE MUNDY HOUSE
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 23b

WALLACE HOUSE

A finding of No Adverse Effect has been determined for the Wallace House. In the area of the resource, project implementation would consist of the widening and reconstruction of SR 54 from two lanes to four 11-foot lanes with a 14-foot flush median, construction of a 5-foot sidewalk and bike lanes along both sides of the improved roadway, and 12 to 18 feet of temporary easement (See Figures 24a – 24b)

Physical destruction of or damage to all or part of the property would occur; however, this effect is not considered adverse. There would be no acquisition of ROW from within the boundary of the Wallace House, but a variable amount of temporary easement, ranging from approximately 12 feet to 18 feet, would be required. In addition, a driveway easement would be necessary to tie the existing driveway to the improved roadway. However, no features that contribute to the eligibility of the Wallace House would be affected. The contributing magnolia trees located at either side of the driveway are outside the area of the temporary easement and would not be harmed by implementation of the project. The proposed project would also construct a sidewalk and result in a change to the existing edge of pavement, reducing the setback of the resource; however, the sidewalk and change to the edge of pavement would occur outside the eligible boundary.

Project implementation would not result in a change in the character of the property's use. There are no direct or indirect effects anticipated to the Wallace House that would alter the character of the continued residential use of the property. Although the house is currently vacant and there would be some reduction of the front yard, this change to the edge of pavement would occur within the existing ROW. As such, project implementation would not diminish the future desirability of the house to return to residential use. Therefore, project implementation would not result in a change in the character of the property's use.

Project implementation would not result in a change in the character of the property's physical features within the property's setting that contribute to its historic significance. Although construction activity would occur within the boundary of the Wallace House, the 12 to 18 feet of temporary easement

would not alter or destroy the contributing magnolia trees that currently exist in the front yard. Both trees are located outside of the area of the easement. The proposed sidewalk and the change to the edge of pavement would also not remove or destroy any features that contribute to the eligibility of the resource as these aspects of the proposed project would occur outside of the eligible boundary.

Project implementation would not result in the introduction of visual elements that diminish the integrity of the property's significant historic characteristics or features. State Route 54 has been and would continue to be an element of the visual character of the property. There would be a change however to the visual perception. The current distance between the house and edge of pavement is approximately 87 feet; following implementation of the project, the distance would be approximately 75 feet. This 12 foot change to the edge of pavement however would occur within the existing ROW and outside of the eligible boundary. While the setback would be reduced, the majority of the front yard would remain intact. In addition, contributing features, such as the magnolia trees, would not be affected as they are located outside of the area for the temporary easement. The proposed sidewalk would also not result in the introduction of a visual element that diminishes the setting of the Wallace House. The proposed sidewalk would be constructed within the existing ROW and outside of the eligible boundary. Furthermore, the surrounding area has already been significantly altered by the presence of numerous nonhistoric residential and institutional properties along SR 54. Within the immediate vicinity of the Wallace House are a modern church to the west and a modern housing development to the east. Other nonhistoric residential properties are located further to the east of the resource. Therefore, the enlargement of the existing transportation facility would not compromise the visual character of the property.

Project implementation would not result in the introduction of atmospheric elements that diminish the integrity of the property's significant historic characteristics or features. There would be no atmospheric effect to this property as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Project implementation would not audibly affect the Wallace House. The existing noise level at the property is 66 dBA Leq. The no-build noise level at the property is 69 dBA Leq. The build noise level (design year 2033) at the resource is 69 dBA Leq. Although the build noise level exceeds the FHWA noise abatement criterion of 67 dBA Leq established for residential land use, this three decibel increase would occur over twenty years and would not be perceptible to the human ear.

Project implementation is not anticipated to indirectly affect the Wallace House. No change in traffic patterns would result from project implementation. No additional access to the existing transportation facility would be provided and no existing access to the facility would be removed. The proposed project would only increase the capacity of the existing roadway to meet current and anticipated future demand.

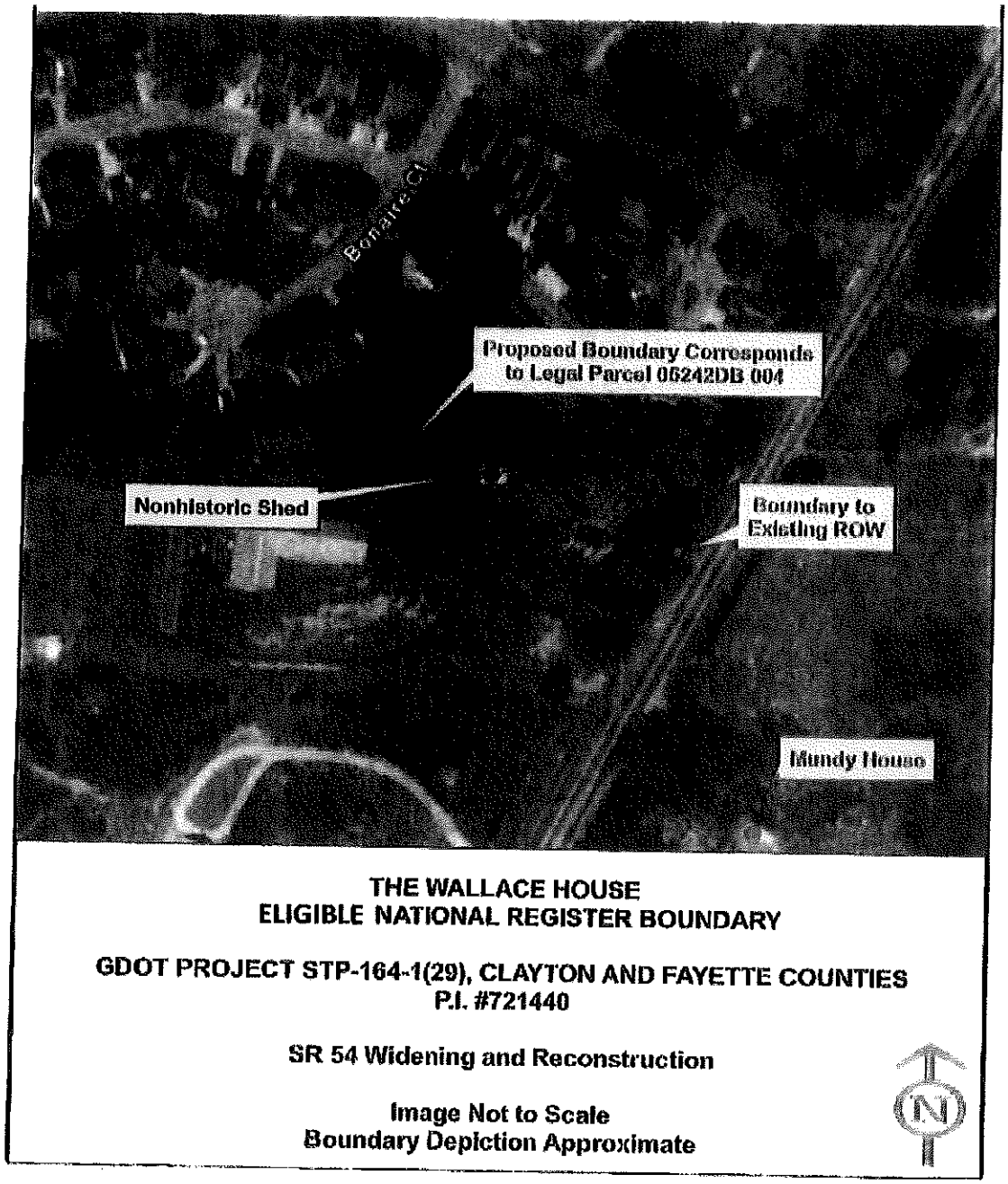

Bonaire Ct
Proposed Boundary Corresponds to Legal Parcel 05242DB 004
Nonhistoric Shed
Boundary to Existing ROW
Mundy House
THE WALLACE HOUSE
ELIGIBLE NATIONAL REGISTER BOUNDARY
GDOT PROJECT STP-164-1(29), CLAYTON AND FAYETTE COUNTIES
P.I. #721440
SR 54 Widening and Reconstruction
Image Not to Scale
Boundary Depiction Approximate
N

Figure 24a

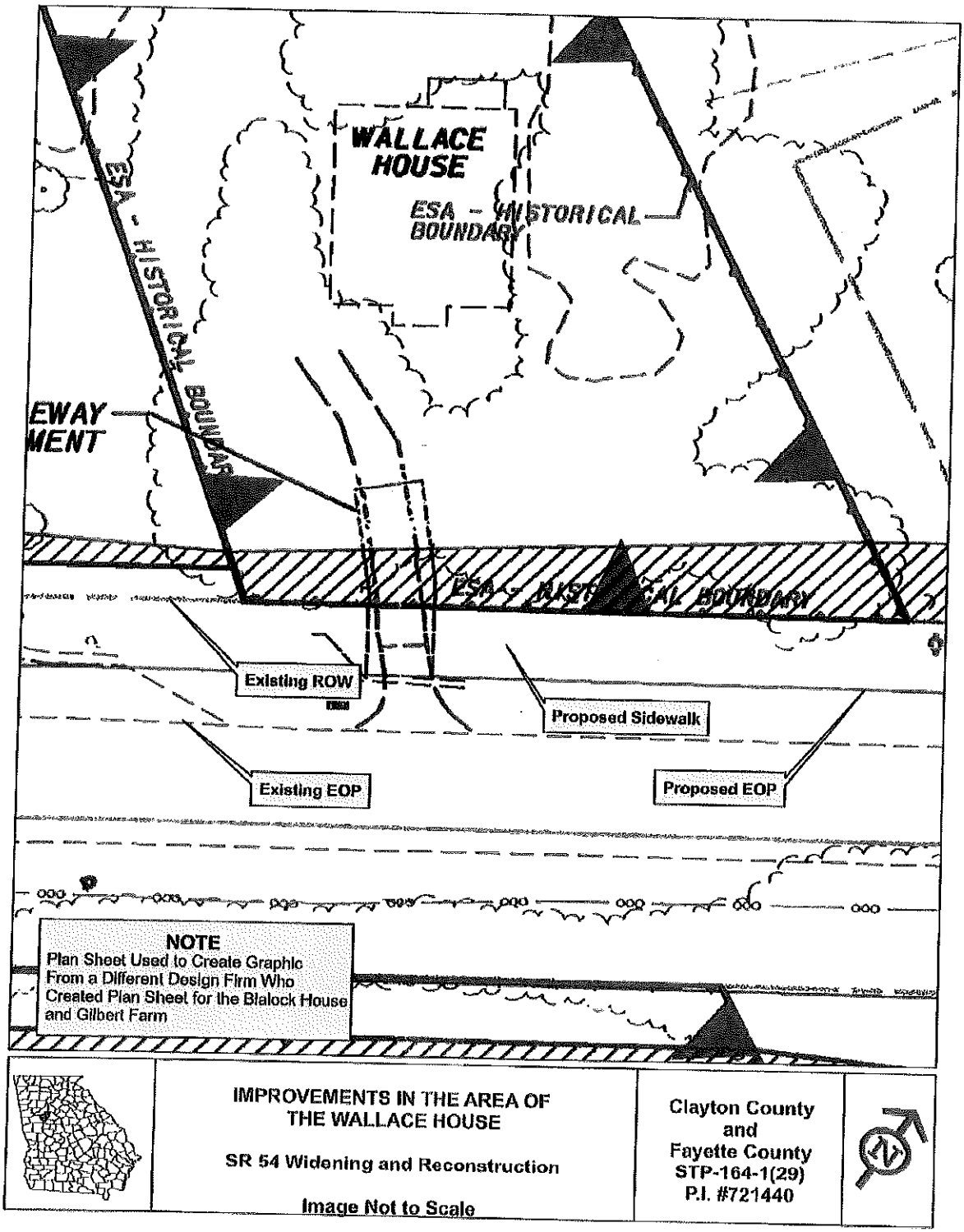

WALLACE HOUSE
ESA - HISTORICAL BOUNDARY
ESA - HISTORICAL BOUNDARY
EWAY
MENT
ESA - HISTORICAL BOUNDARY
Existing ROW
Proposed Sidewalk
Existing EOP
Proposed EOP
NOTE
Plan Sheet Used to Create Graphic From a Different Design Firm Who Created Plan Sheet for the Blalock House and Gilbert Farm
IMPROVEMENTS IN THE AREA OF THE WALLACE HOUSE
SR 54 Widening and Reconstruction
Image Not to Scale
Clayton County and Fayette County
STP-164-1(29)
P.I. #721440

Figure 24b

Indirect Effects

Project implementation is not anticipated to indirectly affect historic resources. The project is not expected to precipitate development along the project corridor that could result in the destruction or degradation of historic resources. While there may be numerous NRHP eligible resources within the vicinity of the project corridor, it is not anticipated that these would be impacted as a result of this capacity enhancement project.

Cumulative Effects

Project implementation is not anticipated to result in cumulative effects to historic resources. The project is not expected to precipitate development along the project corridor that could result in the destruction or degradation of historic resources. Traffic patterns in the area of several resources could change. Overall, these changes are anticipated to facilitate traffic flow in the area of the resources.

AVOIDANCE, MINIMIZATION, AND MITIGATION EFFORTS

Planning to minimize harm was taken into consideration to the extent possible during project development. In the area of the Gilbert Farm and the Blalock House, the project as currently designed minimizes harm to the resources and avoids an adverse effect to them. An alternative alignment was selected along the Mundy House in order to minimize the impacts while ensuring the Wallace House would not be adversely affected. An avoidance of the adverse effect to the Mundy House was considered but was not feasible. Avoiding the adverse effect requires avoiding all use of land from the resource. Also, design changes were made to minimize harm to the resource. As a result of the minimization alternative, the amount of required ROW and setback has been reduced, but in spite of the minimization efforts, the Mundy House would still be adversely affected by the proposed project. As such, measures, such as a historical narrative, photo documentation, and a landscape plan, have been put in place to mitigate this adverse effect. Please refer to IV. Section 4(f) Evaluation on pages 172 – 173 for a detailed discussion of these avoidance, minimization, and mitigation measures.

3. Archaeological Resources

Direct Effects

An archaeological survey (Level 1) was conducted within the project corridor in accordance with GDOT Archaeological Survey Guidelines developed by the GDOT staff archaeologists in consultation with DNR Historic Preservation Section staff and concurred in by the FHWA and SHPO. These guidelines provide general survey boundaries and methodological approaches to archaeological surveys based on the type/scope of proposed highway projects and are followed during the initial identification of archaeological resources.

No archaeological resources were located within the proposed project corridor. It is concluded, therefore, that the project would not affect archaeological resources on or eligible for inclusion in the NRHP. This conclusion has been coordinated with the SHPO, Alabama-Coushatta Tribe of Texas, Poarch Band of Creek Indians, and the Seminole Tribe of Florida.

4. Parklands/Recreation Areas/Wildlife Refuges

The McCurry Park Baseball Field is located at 164 McDonough Rd, approximately 1400 feet east of the SR 54/McDonough Road intersection. The Fayette County Youth Soccer field, located at 102 McDonough Road, is less than 200 feet east of the same intersection. There are no other publicly owned parklands/recreation areas/wildlife refuges of state, local or national significance located along the project corridor.

Direct Effects

No ROW or easements would be taken from the recreational facilities mentioned above, and while travel time to these facilities may increase during construction of the proposed project, this would be temporary in nature. Project implementation would provide better access and connectivity between Clayton and Fayette Counties. Therefore, project implementation would not affect these resources.

Indirect Effects

The proposed project is not expected to precipitate changes in community cohesion or alter the existing neighborhood demographic; therefore, it is not likely that parks and recreational areas in the vicinity would be indirectly affected in the foreseeable future.

Cumulative Effects

The proposed project is not expected to precipitate changes in community cohesion or substantially alter the existing neighborhood demographic. Therefore, the proposed project would not result in any reasonably foreseeable cumulative effects to Parklands/Recreation Areas/Wildlife Refuges in the immediate area of the project corridor or in the surrounding neighborhoods.

5. Section 4(f) Applicability

Section 4(f) refers to the temporary and/or permanent use and constructive use of land from a significant publicly owned park, recreation area, or wildlife and waterfowl refuge, or any historic site.

A temporary occupancy will not constitute a use of 4(f) resource when all of the conditions set forth in 23 C.F.R. 771.135(p)(7) are met:

1. Duration (of the occupancy) must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
2. Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the 4(f) resource are minimal;
3. There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purpose of the resource, on either a temporary or permanent basis;
4. The land being used must be fully restored, i.e., the resource must be returned to a condition which is at least as good as that which existed prior to the project; and
5. There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions.

Investigation of the project corridor has identified that the proposed project would require permanent use of land from the Blalock House and the Mundy House. In the area of the Blalock House approximately 70 feet of right-of-way would be acquired from within the historic boundary. In addition, the edge of pavement would move approximately 60 feet closer to the house. Finally, the proposed project

would construct a 5 foot sidewalk along SR 54 within the historic boundary of the Blalock House. However, this effect is not considered adverse because only a small percentage of the overall property would be affected by the proposed project and no contributing features would be altered or destroyed. The front yard of the Blalock House is currently characterized by scattered pine trees to the east of the driveway, between the house and roadway. The proposed project would construct a 5 foot sidewalk along SR 54 within the historic boundary of the Blalock House. However, the area within which this construction activity would occur consists of a portion of the property's grassed lawn and three of the approximately twenty-five pine trees which are located in the resource's front lawn. The proposed construction is also required within the historic boundary in order to allow for a break in the median for turning movements along SR 54. This would result in the widening of the roadway to extend far enough into the boundary to result in the loss of the three pine trees. Although three of these trees would be removed, these trees are those located closest to the roadway. Also, approximately twenty-two pine trees would remain to continue to act as a buffer between the house and improved roadway.

On April 17, 2009, the Historic Preservation Division (HPD) concurred that the proposed project will have no adverse effect on the Blalock House. Based on this concurrence, GDOT and FHWA have made a de minimis finding for this resource in accordance with Section 6009(1) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Approximately 18 feet of ROW would be acquired from the historic boundary of the Mundy House along SR 54. Currently, the façade of the house is situated approximately 108 feet from the existing ROW; following project implementation, ROW would be located approximately 90 feet from the house. The setback of the house would also be adversely affected. The edge of pavement is currently located approximately 135 feet from the house; following project implementation, the edge of pavement would be approximately 105 feet from the house.

Further affecting the Mundy House would be the loss of several contributing features. In order to correct the current skewed intersection of the driveway and SR 54, the driveway would be relocated towards the center of the domestic yard and would intersect SR 54 at a 90-degree angle. Lining one side of the driveway is an historic rock retaining wall that would be removed as a result of the implementation of the project. The widening of SR 54 and proposed cut activity would also result in the loss of the vegetation that currently screens the Mundy House from the roadway. The loss of the historic entrance to the property, the rock retaining wall, and the vegetation would result in an adverse effect to the Mundy House. Therefore, a Section 4(f) evaluation is required for the Mundy House (See IV, Section 4(f) Evaluation).

In the area of the Wallace House, although a variable amount of temporary easement, ranging from approximately 12 feet to 18 feet, would be required in addition to a driveway easement that would be necessary to tie the existing driveway to the improved roadway, no features that contribute to the eligibility of the Wallace House would be affected. The contributing magnolia trees located at either side of the driveway are outside the area of the temporary easement and would not be harmed by implementation of the project. The proposed project would also construct a sidewalk and result in a change to the existing edge of pavement, reducing the setback of the resource; however, the sidewalk and change to the edge of pavement would occur outside the eligible boundary. On April 17, 2009, HPD concurred that the proposed project will have no adverse effect on the Wallace House. Since the criteria mentioned above has been met, the proposed project would not result in a 4(f) impact as set forth in 23 C.F.R. 771.135(p)(7) for the Wallace House.

D. Effects on the Natural Environment

1. Water Quality

Direct Effect

This project is located in the Upper Flint Watershed Hydrologic Unit Code (HUC) 03130005. A survey of the project corridor revealed two wetlands, two open waters, two ephemeral channels, two

intermittent streams, and five perennial streams. Principle water sources within this HUC are Little Cotton Creek, Big Cotton Creek, Indian Creek, and the Flint River. Within the project vicinity are Morning Creek, Camp Creek, and the Flint River. Streams along the corridor are classified for use as fishing. Morning Creek, Camp Creek, and the Flint River are listed on EPD's 2008 list of Streams Not Supporting Designated Uses for violation of the fecal coliform criterion due to urban and nonpoint sources. No streams within one mile of the proposed project are listed for violation of the impacted biota criterion.

Upon determination that a water does not support its designated use, Georgia EPD would develop a total maximum daily load (TMDL) as the start of the process of restoring the water. A TMDL determines how much of a particular pollutant a waterbody can contain and still support its designated use. Urban runoff is being addressed in the EPD Stormwater Management Strategy for metropolitan Atlanta. In addition, all drinking water reservoirs watersheds in Clayton and Fayette Counties are protected by a reservoir management plan and a Watershed Protection District ordinance. No significant impacts to water quality in the project area are expected to occur as a result of the proposed project.

A National Pollutant Discharge Elimination System (NPDES) Permit would be obtained for the construction of this project. The Clean Water Act prohibits the discharge of discharging "pollutants" through a point source" into a "water of the United States" unless they have an NPDES permit. The permit will contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that discharge does not hurt water quality or people's health. An Erosion, Sedimentation, and Pollution Control (ES&PC) Plan would be completed for this project as part of the NPDES Permit. The purpose of the plan is to prevent and minimize erosion and the resultant sedimentation of state waters as much as possible.

Provisions in the construction contract would require the contractor to exercise every reasonable precaution during construction to prevent the pollution of streams in the project vicinity. Where possible, early revegetation of disturbed areas would be accomplished so as to hold soil movement to a minimum.

Dumping of chemicals, fuels, lubricants, bitumens, raw sewage, or other harmful wastes into or alongside of streams or impoundments, or natural or manmade channels leading thereto, would be prohibited. Additional contract provisions would require the use of temporary erosion control measures as shown on the construction plans or as deemed necessary during construction. These temporary measures may include the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods, as applicable. These provisions are coordinated with the permanent erosion control features insofar as practical to assure economical, effective, and continuous erosion control throughout the construction and post-construction periods and are in accordance with the 23 CFR, Part 650, Subpart B. The proposed project corridor has been surveyed with respect to involvement with Waters of the U.S. as required by the provisions of Executive Order 11990 and subsequent federal regulations. Pedestrian surveys of the project area were conducted on July 5 and 19 and August 7 and 14, 2007 to determine the potential impacts as a result of the proposed project.

Indirect Effects

Indirect Impacts are expected to occur as a result of the project and the corridor's growing residential development. Water runoff tends to flow faster on impervious surfaces. As development continues more concrete would be put in place for surfaces like driveways, delivery entrances, turn lanes, Etc. A consequence of adding more impervious surfaces would be that the water runoff will reach the outfalls at a faster speed which could erode ditch channels at these outfalls. Measures are taken to prevent this from happening. For example, rip rap is added to outfalls to help control the erosion of the ditch channel.

Also, the addition of more lanes along the project corridor would result in increased traffic. Increased traffic would induce more pollutants from vehicles that may flow into water resources contributing to highway runoff. As a result, the amount of contaminants reaching streams and wetlands could increase. With increased runoff is the potential to negatively impact water quality. However, as part of the construction contract, design measures such as maintaining and planting trees and other native

vegetation, protecting buffers, and managing the quantity and quality of storm water discharge are in place to reduce transportation runoff. These same measures would also minimize impacts as a result of urban runoff (contaminants and debris from roads, rooftops, buildings, parking lots or sources).

These provisions are coordinated with the permanent erosion control features insofar as practical to assure economical, effective, and continuous erosion control throughout the construction and post-construction periods and are in accordance with the 23 CFR, Part 650, Subpart B.

The comprehensive plans for both Clayton and Fayette Counties contain ongoing measures to protect all drinking water reservoirs.

Cumulative Effects

Cumulative Impacts, as a result of this project, are expected to occur. Since 1990, both counties have experienced steady population growth and increased development. There has been addition of impervious surfaces across the counties and the in the vicinity of the project area over the years, and hence, increased run-off. Approximately 2,178,000 sq ft (50 acres) of new impervious surface (asphalt pavement, concrete median, sidewalk and bike lanes) will be added with this project. In spite of this, Waters of the US are regulated by federal and state programs, including Section 404 of the Clean Water Act and Georgia Erosion and Sedimentation Control Act. These regulations should be a positive factor in maintaining water quality.

2. Waters of the U.S.

a) Wetlands

Direct Effects

Although wetlands were given special consideration during the location of this project, two wetland impact sites were identified during environmental field surveys (see Figures 32a and 32b). Wetland findings are discussed below:

Wetland 4 is a large riverine forested wetland system associated with Morning Creek. Much of the wetland is outside the project corridor with project limits just skirting the wetland's boundary. Along the proposed alignment, the wetland extends approximately 830 feet southwest of Morning Creek on the southeast side of SR 54. Northwest of SR 54, the wetland extends approximately 280 feet southwest of the creek. The wetland also extends northeast of Morning Creek, but on the southeastern side of SR 54, it is approximately 200 feet outside the proposed ROW. Northwest of SR 54, the wetland extends approximately 170 feet northeast of Morning Creek. Just to the southwest of the SR 54 crossing of Morning Creek, a large utility ROW bisects the wetland. This medium quality wetland has been impacted by the construction of SR 54 and the 1997 replacement of the SR 54 bridge over Morning Creek. The wetland has also been impacted by the placement of power lines and the large swath of ROW associated with these transmission lines, although not to the extent that Wetland 6 has been impacted by a similar utility ROW. Most of Wetland 4 along the project corridor is a forested, floodplain wetland. Vegetation in the wetland includes red maple, tulip poplar, giant cane (*Arundinaria gigantea*), Japanese honeysuckle, Chinese privet, musclewood (*Carpinus caroliniana*), buttonbush (*Cephalanthus occidentalis*), and lizard's tail (*Saururus cernuus*). Indicators of hydrology in Wetland 4 include free water in the soil pit at three inches, soils saturated at the surface, drainage patterns, ponded water in some areas, and buttressed tree roots. The proposed project would result in the fill of 0.149 acre and the clearing of an additional 0.074 acre for a total of 0.223 acre of impact to Wetland 4.

Wetland 6 is a large riverine forested wetland system associated with Camp Creek and the Flint River. This medium to high quality wetland has been impacted by the construction of SR 54 and the 1997 replacement of the SR 54 bridges over Camp Creek and the Flint River. The wetland has also been impacted by the placement of power lines and the large swath of ROW associated with these transmission lines. The section of the wetland within the powerline ROW consists mostly of emergent vegetation with a shrub-scrub community in the transition zone between the emergent and forested areas. Vegetation in the emergent area consists of wool grass (*Scirpus cyperinus*), tear thumb (*Polygonum sagittatum*), rice cutgrass

(*Leersia oryzoides*), munro grass (*Panicum rigidulum*), arrowheads (*Sagittaria spp.*), cattails (*Typha latifolia*), arrow arum (*Peltandra virginica*), climbing hempvine (*Mikania scandens*), smartweeds (*Polygonum spp.*), soft rush (*Juncus effusus*), lizard's tail, tag alder (*Alnus serrulata*), and swamp milkweed (*Asclepias incarnata*). The vegetation in the emergent portion of the wetland is extremely dense. In the shrub-scrub zone, the plant species are similar to those found in the emergent area, but the vegetation is not quite as dense and includes more tree and shrub species. Additional species found in the shrub-scrub community include red maple, black wouldow, button bush (*Cephalanthus occidentalis*), and American bur-reed (*Sparganium americanum*). Most of Wetland 6 along the project corridor is a forested, floodplain wetland. Vegetation in the forest includes American sycamore, red maple, green ash, Southern arrowwood (*Viburnum dentatum*), giant cane, false nettle, cardinal flower, Nepalese browntop, inland sea oats, green briars, and poison ivy. Indicators of hydrology in Wetland 6 include soils saturated at the surface, drainage patterns, ponded water in some areas, water-stained leaves, buttressed tree roots, sediment deposition on debris and plants, and drift lines. The proposed project would result in the fill of 1.039 acres and the clearing of an additional 1.496 acres for a total of 2.535 acres of impact to Wetland 6.

These wetland sites displayed the characteristics required for wetland definition as given in the 1987 Corps of Engineers Wetlands Delineation Manual:

1) prevalence of hydrophytic vegetation

2) hydric soils

3) permanent or periodic inundation or saturation.

The wetland impact areas are described in Table 8b.

The functions provided by these wetlands are the provision of wildlife habitat, nutrient/sediment retention, some dissipation of erosive forces, and overflow for Morning Creek, Camp Creek and the Flint River. The maximum acreage of potential wetland impact, determined by measuring within the proposed construction

limits/ROW, is 2.758 acres. Wetland credits would also be purchased to mitigate impacts resulting from this project.

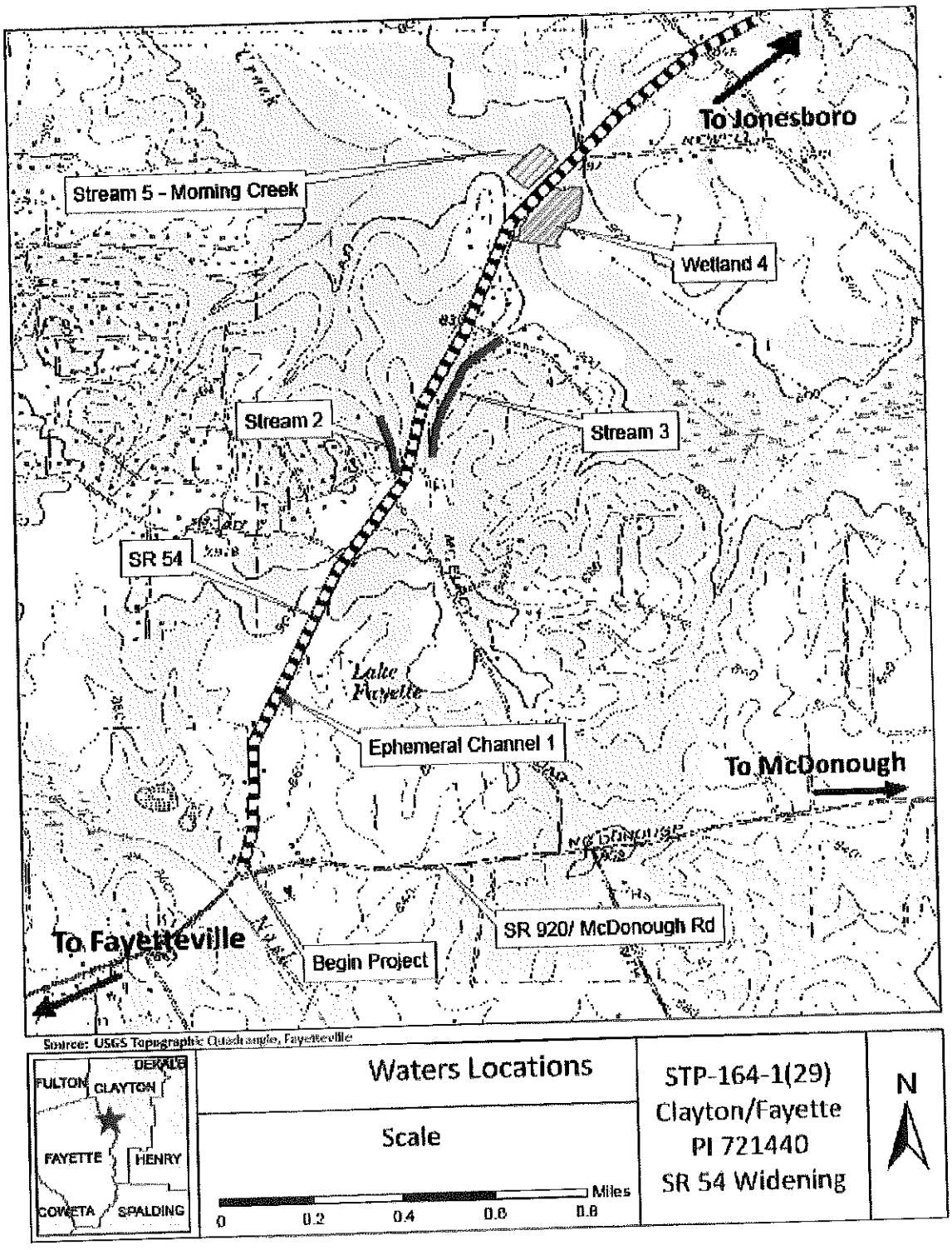

To Jonesboro
Stream 5 - Morning Creek
Wetland 4
Stream 2
Stream 3
SR 54
Lake Fayette
Ephemeral Channel 1
To McDonough
SR 920/ McDonough Rd
To Fayetteville
Begin Project
Source: USGS Topographic Quadrangle, Fayetteville
DEKALB
FULTON
CLAYTON
FAYETTE
HENRY
COWETA
SPALDING
Waters Locations
Scale
Miles
0
0.2
0.4
0.6
0.8
STP-164-1(29)
Clayton/Fayette
PI 721440
SR 54 Widening
N

Figure 25a

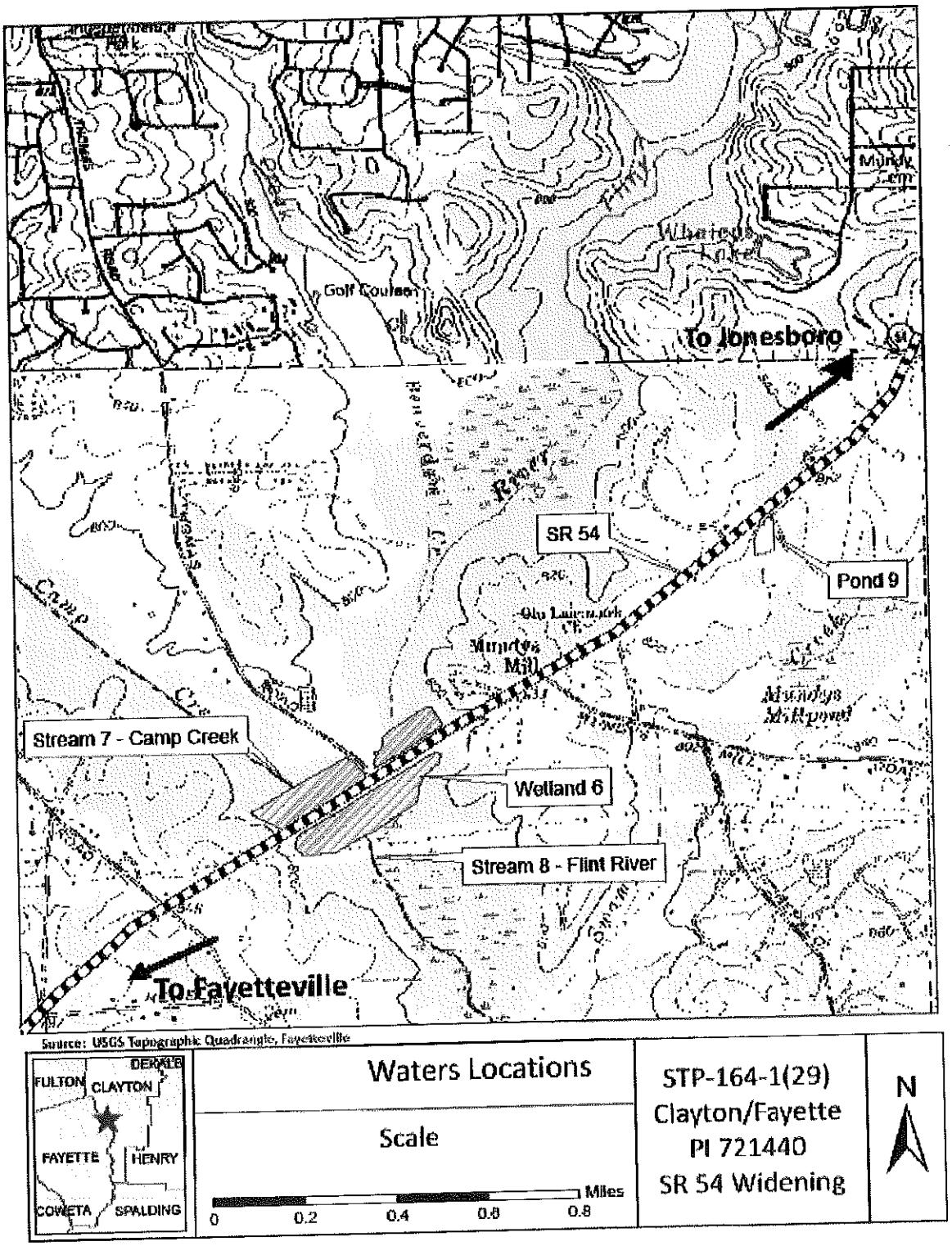

To Jonesboro
SR 54
Pond 9
Stream 7 - Camp Creek
Wetland 6
Stream 8 - Flint River
To Fayetteville
Golf Course
Source: USGS Topographic Quadrangle, Fayetteville
FULTON
CLAYTON
DEKALB
FAYETTE
HENRY
COWETA
SPALDING
Waters Locations
Scale
Miles
0
0.2
0.4
0.8
0.8
STP-164-1(29)
Clayton/Fayette
PI 721440
SR 54 Widening
N

Figure 25b

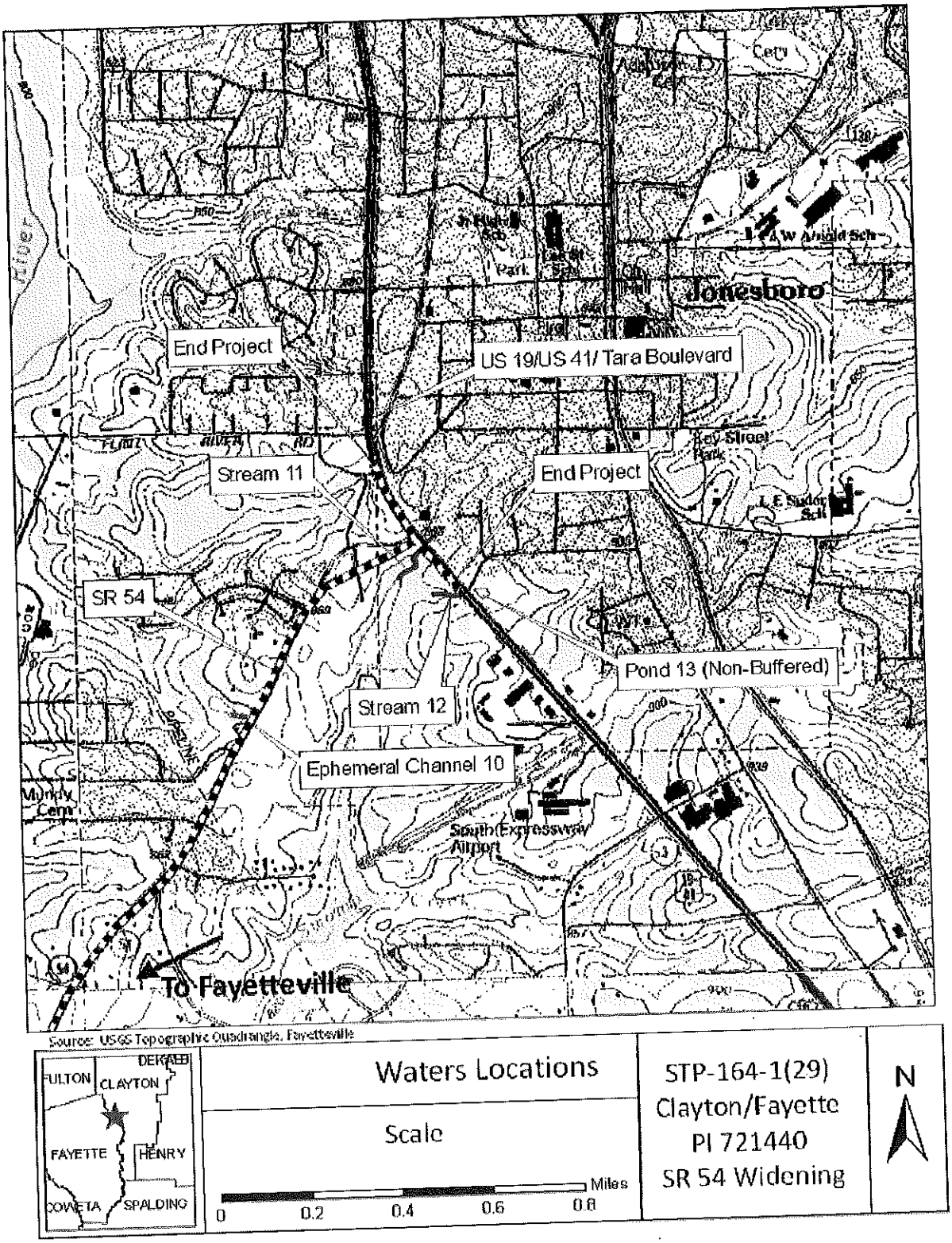

End Project
US 19/US 41/ Tara Boulevard
Jonesboro
Stream 11
End Project
SR 54
Pond 13 (Non-Buffered)
Stream 12
Ephemeral Channel 10
To Fayetteville
Source: USGS Topographic Quadrangle, Fayetteville
FULTON
CLAYTON
DEKALB
FAYETTE
HENRY
COWETA
SPALDING
Waters Locations
Scale
0 0.2 0.4 0.6 0.8 Miles
STP-164-1(29)
Clayton/Fayette
PI 721440
SR 54 Widening
N

Figure 25c

b. Streams

Direct Effects

Two ephemeral channels and seven streams are located along the project corridor (see Figures 25a – 25c). Table 8a contains a summary of stream impacts. Stream findings are discussed below:

Ephemeral Channel 1, an unnamed tributary to Lake Fayette, is located approximately 1,500 feet north of the beginning of the project. The channel, which is perpendicular to existing SR 54, is only present on the southeast side of the roadway. From the road, the channel runs southeast through a mowed and maintained area to Lake Fayette (located well outside ROW). Ephemeral Channel 1 is one to two feet wide, completely vegetated, and lacking in channel definition. Vegetation in and around the stream consists of fescue (*Festuca sp.*) and English plantain (*Plantago lanceolata*). The proposed project would include the placement of a pipe at the head of Ephemeral Channel 1. This would result in 15 linear feet of impact to the stream. The total area of this impact would be 0.00069 acre.

Stream 2, an unnamed tributary to Morning Creek, is an intermittent stream located at the intersection of SR 54 and Deer Forest Trail. The stream flows from a pipe under SR 54 and runs diagonally in a northward direction from the northwest quadrant of the intersection. This low quality channel has a bankfull width of three to four feet and bankfull depth of approximately one foot. The top of bank ranges from two to four feet. At the time of the survey, no water was flowing in the channel, but the substrate, which consists solely of silt, was saturated. The stream has a well-defined channel, wrested vegetation, and no sinuosity. The riparian buffer within the existing ROW is extremely over grown with kudzu. Chinese privet is the dominant riparian species as the stream runs farther from the roadway. During the survey, the portion of the stream nearest the pipe outlet had been disturbed due to an intersection improvement project currently under construction. Stream 2 is not listed as a trout stream nor is it listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses; however, Morning Creek is 303(d) listed for violation of the Fecal Coliform bacteria criterion. The proposed project would

result in 96 feet (0.0077 acre) of impact to Stream 2 due to the extension of pipes at the SR 54-Deer Forest Trail intersection. A stream buffer variance would not be required for Stream 2 as the proposed disturbance is necessary for the construction of a roadway drainage structure at a crossing.

Table 8a. Summary of Stream Impacts

Stream #/ Name	Coordinates	Drainage Association	Lost Type	HUC #	Stream Description	On 303(d) List?	SBV Required?	Length (feet)/ Area(acres)/ Type of Permanent Impact
Ephemeral Channel 1, unnamed tributary to Lake Fayette	33.462636° -84.419983°	Upper Flint	Ephemeral	03130005	Small, vegetated ephemeral channel located 1600' north of project begin. Drainage to Lake Fayette within a mowed and maintained area.	No	No	15/ 0.00069/ Fill
Stream 2, Unnamed tributary to Morning Creek	33.469386° -84.415246°	Upper Flint	Intermittent	03130005	Located at the intersection of SR 54 and Deer Forest Trail. Flows from a pipe under SR 54, runs diagonally in a northward direction channel with bankfull width 3-4', depth 2-4'. Top of bank 2-4'. No flower during survey, but silty substrate was saturated. Well-defined channel, wrested vegetation, and no sinuosity. Buffer dominated by kudzu and Chinese privet. Disturbed by road construction at time of survey.	No	No	96/ 0.0077/ Crossing
Stream 3, unnamed tributary to Morning Creek	33.462636° -84.409503°	Upper Flint	Intermittent	03130005	Located just outside ROW between Oak Manor Rd and Henderson Rd east of SR 54. Medium quality stream with bankfull width 3-6', depth 6-18". Channel entrenched, incised in areas with bank height up to 8'. No flow, some pools during survey. Well-defined channel, moderate sinuosity, grade control points, moderate bank stability, substrate sorting, wrested, vegetation. Substrate is sand, silt, gravel. As the stream runs downhill, topography flattens, channel becomes braided. Buffer is intact, forested. Veg. includes red maple, sweetgum, slippery elm, sweet bay, sugar maple, loblolly pine, hop-hornbeam, white oak, water oak, black cherry, Chinese privet, green ash, muscadine, greenbriers, climbing hydrangea, poison ivy, Virginia creeper, netted chain fern, sensitive fern, cinnamon fern, Christmas fern, jewelweed, Nepalese browntop, false nettle, blackberry, and dayflower. Quality adversely affected by the construction of an adjacent subdivision.	No	No	0
Stream 5, Morning Creek	33.472499° -84.413485°	Upper Flint	Perennial	03130005	Located 0.35 miles SW of the Fayette-Clayton County line. Medium quality stream with bankfull width 40', depth 3-6'. Turbidity slight to moderate w/ most turbid areas in scour pools around SR 54, flow low to moderate during survey, water depth well below normal. Downstream of SR 54, banks are unstable, eroding, undercutting. High quality upstream of SR 54 bridge. Outside the proposed ROW, is braided system w/ a forested floodplain WL. Veg. includes red maple, black willow, river birch, hop-hornbeam, red mulberry, sweetgum, green ash, greenbrier, poison ivy, Japanese honeysuckle, inland sea oats, lizard's tail, false nettle, giant cane, smartweed, sensitive fern, blackberry.	No	No	0

Table 8a. Summary of Stream Impacts (Continued).

Stream #/ Name	Coordinates	Drainage Association	Lost Type	HUC #	Stream Description	On 303(d) List?	SBV Required?	Length (feet)/ Area(acres)/ Type of Permanent Impact
Stream 7, Camp Creek	33.485751° -84.397498°	Upper Flint	Perennial	03130005	Located on the Fayette-Clayton County line approx.750' SW of the SR 54 bridge over Flint River. Confluence of Camp Cr. and Flint River is approx. 550' SE of SR 54 crossing. Medium quality bankfull 30-50' width, depth is 4-8'. Flow low to moderate, depth 2-3' below normal, turbidity high around bridge during survey. Banks are unstable, eroding in some areas. Substrate is silt, sand, gravel with silt overlaying. Riparian buffer mostly intact and is high quality forested floodplain wetland. Veg. includes those species found in the forested portion of WL 6.	No	No	0
Stream 8, Flint River	33.486884° -84.395308°	Upper Flint	Perennial	03130005	Located approx. 750' NE of the Fayette-Clayton County line and the SR 54 bridge over Camp Cr. Medium quality with bankfull width 80-100', w/ some narrower braided channels, bankfull depth 5-15'. Flow and water depth appeared to be lower than normal, moderate turbidity during survey. Banks unstable, eroding in some areas especially in the vicinity of the SR 54 crossing. Substrate is silt, sand with silt overlaying. Buffer mostly intact and consists of a high quality forested floodplain WL. Veg includes species found in the forested portion of WL 5.	Yes	No	0
Ephemeral Channel 10, Unnamed tributary to Flint River	33.508772° -84.368380°	Upper Flint	Ephemeral	03130005	Located across from the SR 54 and Jenni Lane intersection on the NW side of SR 54. Conveys drainage from a subdivision to a small pond approx. 100' NW of proposed SR 54 ROW. 2-3' wide, very poorly defined. Veg. is black willow, sweetgum, green ash saplings, greenbrier, poison ivy, blackberry, ironweed.	No	No	35/ 0.002/ Fill
Stream 11	33.514114° -84.362041°	Upper Flint	Perennial	03130005	Located on the northern end of the project corridor at the intersection of SR 54 and US 19/US 41/Tara Boulevard. This medium quality stream has a bankfull width of 4-6' and depth of 1'. Flow was low to moderate. Banks are somewhat unstable and eroding in some areas. The substrate is silt and sand.	No	No	0
Stream 12	33.512364° -84.359950°	Upper Flint	Perennial	03130005	Located approx. 100' beyond the NE end of the project corridor. SE of the intersection of SR 54 and US 19/US 41/Tara Boulevard. Medium quality stream has a bankfull width of 3-5' and depth of 1-2'. Flow was low to moderate at the time of survey. Banks are somewhat unstable and eroding. Substrate is silt and sand. Riparian buffer has been cleared with the exception of a surrounding 10' wide portion consisting of mostly sweetgum and mimosa.	No	No	0
					TOTAL IMPACTS			146 ft / 0.01ac*

***Total includes 50 feet of ephemeral channels. Total linear footage to be mitigated as stream is 96 feet (does not include ephemerals). Total area to be mitigated as ephemeral channel is 0.00269 acres.**

Table 8b. Summary of Wetland and Open Water Impacts

Site	Coordinates	Water Regime	Drainage Association	HUC #	Wetland Description	Area (acres) of Temporary Impact	Area (acres) of Permanent Impact
Wetland 4	33.478158° -84.409480°	Temporarily flooded	Upper Flint	03130005	Large riverine forested wetland system associated w/ Morning Creek. Medium quality -- impacted by SR 54, power lines and associated ROW. Forested, floodplain wetland. Vegetation: red maple, tulip poplar, giant cane, Japanese honeysuckle, Chinese privet, musclewood, buttonbush, lizard's tail. Hydrology: free water in the soil pit at 3", soils saturated at surface, drainage patterns, ponding/inundation, buttressed tree roots.	0.074	0.149
Wetland 6	33.485071° -84.398306°	Semi-permanently / Seasonally flooded	Upper Flint	03130005	Large riverine forested wetland system assoc. w/ Camp Creek, Flint River. Medium to high quality -- impacted by SR 54, power lines and assoc. ROW. Within powerline ROW vegetation emergent w/ a shrub-scrub community in the transition zone between emergent and forested (majority of WL) areas. Vegetation: wool grass, tear thumb, rice cutgrass, munro grass, arrowheads, cattails, arrow arum, climbing hempvine, smartweeds, soft rush, lizard's tail, tag alder, swamp milkweed, red maple, black willow, button bush, and American bur-reed. American sycamore, green ash, Southern arrowwood, giant cane, false nettle, cardinal flower, Nepalese browntop, inland sea oats, green briers, poison ivy. Hydrology: soils saturated at the surface, drainage patterns, ponding, water-stained leaves, buttressed tree roots, sediment deposition on debris and plants, drift lines.	1.496	1.039
Pond 9	33.494763° -84.380918°	Permanently Flooded	Upper Flint	03130005	Residential pond located SE of SR 54 opposite Whaleys Lake Trail. 120' from existing edge of pavement. Buffer is manicured grass w/ no other vegetation. Shallow, no stream flowing in or out, but is diked and connected to adjacent pond. Substrate is silt and sand. SBV required.	0	0
Pond 13	33.512070° -84.358958°	Temporarily Flooded	Upper Flint	03130005	Small detention pond located approximately 250' beyond the northeastern end of the project corridor, southeast of the intersection of SR 54 and US 19/US 41/Tara Boulevard. No streams flow in or out of the pond, although the pond does have an overflow drain which may deposit into the pipe containing Stream 12. The pond is fully vegetated with no wrested vegetation present. The buffer consists of mowed and maintained grasses and planted ornamentals.	0	0
					TOTALS	1.570	1.188
					TOTAL (Temporary and Permanent)	**2.758 acres***	

***Total does not include impacts to ephemeral channels. Total acreage to be mitigated as wetland/open water is 2.761 (includes 0.00269 acres of ephemeral channel).**

Stream 3, an unnamed tributary to Morning Creek, is an intermittent stream located just outside ROW between Oak Manor Road and Henderson Road east of SR 54. This medium quality stream has a bankfull width of three to six feet and bankfull depth of six to 18 inches. The channel is fairly entrenched and incised in some areas with maximum top of bank height reaching approximately eight feet. At the time of the survey, the stream had no flow and only some stagnant pools were present in the channel. The stream has a well-defined channel, moderate sinuosity, several points of grade control, somewhat stable banks, evidence of substrate sorting, and wrested vegetation. Substrate in the channel is mostly sand and silt with some gravel. As the stream runs downhill toward Henderson Road, the topography flattens, and the channel becomes braided. The riparian buffer is intact and forested. Dominant species along Stream 3 include red maple, sweetgum, slippery elm, sweet bay, sugar maple (*Acer saccharum*), loblolly pine, American hop-hornbeam, white oak, water oak , black cherry, Chinese privet, green ash (*Fraxinus pennsylvanicum*), muscadine, green briars, climbing hydrangea (*Decumaria barbara*), poison ivy, Virginia creeper, netted chain fern (*Woodwardia areolata*), sensitive fern (*Onoclea sensibilis*), cinnamon fern (*Osmunda cinnamomea*), Christmas fern, jewelweed (*Impatiens capensis*), Nepalese browntop, false nettle (*Boehmeria cylindrica*), blackberry, and dayflower (*Commelina sp.*). The quality of this stream appears to have been adversely affected by the construction of an adjacent subdivision called "The Oaks". Stream 3 is not listed as a trout stream nor is it listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses; however, Morning Creek is 303(d) listed for violation of the Fecal Coliform bacteria criterion. The proposed project would not impact Stream 3. A stream buffer variance would not be required for Stream 3 as the proposed project would not impact its buffer.

Stream 5, Morning Creek, is a perennial tributary to the Flint River located approximately 0.35 miles southwest of the Fayette-Clayton County line. This medium quality stream has a bankfull width of approximately 40 feet and bankfull depth of three to six feet. Flow was low to moderate the time of the survey, and the water depth appeared to be well below normal levels. Turbidity was slight to moderate with most turbid areas being the scoured areas around the existing SR 54 bridge. Downstream of SR 54,

the creek's banks are unstable and eroding with some evidence of undercutting, and the creek does not have access to its floodplain in some areas. The stream's quality is better upstream of the SR 54 bridge. Outside the proposed ROW, the creek is a braided system that includes a forested, floodplain wetland. Many turtles were observed in the stream including the spiny softshell turtle (*Apalone spinifera*). Riparian vegetation includes red maple, black willow (*Salix nigra*), river birch (*Betula nigra*), American hop-hornbeam, red mulberry (*Morus rubra*), sweetgum, green ash, green briar, poison ivy, Japanese honeysuckle, inland sea oats (*Chasmanthium latifolium*), lizard's tail (*Saururus cernuus*), false nettle, giant cane (*Arundinaria giangtea*), smartweed (*Polygonum sp.*), sensitive fern, and blackberry. Morning Creek is not listed as a trout stream. It is listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses for violation of the Fecal Coliform bacteria criterion. The proposed project would bridge Morning Creek. A stream buffer variance would not be required for Stream 4 because the proposed disturbance is necessary for the construction of a roadway drainage structure (bridge).

Stream 7, Camp Creek, is a perennial tributary to the Flint River located on the Fayette-Clayton County line approximately 750 feet southwest of the SR 54 bridge over the Flint River. The confluence of Camp Creek and the Flint River is approximately 550 feet southeast of the SR 54 crossing. This medium quality stream has a bankfull width of approximately of 30 to 50 feet and bankfull depth of four to eight feet. Flow was low to moderate at the time of the survey, and the water depth appeared to be two to three feet below normal levels. Turbidity was high around the existing bridge and improved downstream of the crossing and a beaver dam. The creek's banks are somewhat unstable and eroding in some areas. The substrate consists of silt, sand, and gravel with silt overlaying much of the sand and gravel substrate. Aside from the existing SR 54 ROW, the riparian buffer is intact and consists of a high quality forested, floodplain wetland. Many turtles and a water moccasin (*Agkistrodon piscivorus*) were observed in the stream. Riparian vegetation includes those species found in the forested portion of Wetland 6. Camp Creek is not listed as a trout stream. Camp Creek is listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses for violation of the Fecal Coliform bacteria criterion. The proposed project

would bridge Camp Creek. A stream buffer variance would not be required for Stream 7 because the proposed disturbance is necessary for the construction of a roadway drainage structure (bridge).

Stream 8, the Flint River, is located approximately 750 northeast of the Fayette-Clayton County line and the SR 54 bridge over Camp Creek. This medium quality stream has a bankfull width of approximately 80 to 100 feet, although some channels in this braided system are much narrower. Bankfull depth is approximately 5 to 15 feet. Flow and water depth appeared to be lower than normal at the time of the survey. Turbidity was moderate. The creek's banks are somewhat unstable and eroding in some areas especially in the vicinity of the SR 54 crossing. Outside this area, the substrate consists of silty sand with silt being the more dominant component. The substrate consists of silt and sand with silt overlaying much of the sand substrate. Aside from the existing SR 54 ROW, the riparian buffer is intact and consists of a high quality forested, floodplain wetland. Many turtles and a water moccasin (*Agkistrodon piscivorus*) were observed in the stream. Riparian vegetation includes those species found in the forested portion of Wetland 6. The Flint River is not listed as a trout stream. The Flint River is listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses for violation of the Fecal Coliform bacteria criterion. The proposed project would bridge the Flint River. A stream buffer variance would not be required for Stream 8 because the proposed disturbance is necessary for the construction of a roadway drainage structure (bridge).

Ephemeral Channel 10, an unnamed tributary to the Flint River, is a low quality channel located across from the SR 54 and Jenni Lane intersection on the northwest side of SR 54. The channel appears to convey drainage from a subdivision to a small pond located approximately 100 feet northwest of the proposed SR 54 ROW. The channel is two to three feet wide and is very poorly defined (does not have a clear continuous bed and bank or wrested vegetation). Vegetation in and around the channel consists of black wouldow, sweetgum, green ash saplings, greenbrier, poison ivy, blackberry, and ironweed (*Vernonia sp.*). Due to the extension of the existing pipe at SR 54, 35 feet (0.002 acre) of the channel would be impacted by the proposed project.

Stream 11, is a perennial stream located on the northern end of the project corridor at the intersection of SR 54 and US 19/US 41/Tara Boulevard. This medium quality stream has a bankfull width of approximately four to six feet and bankfull depth of one foot. Flow was low to moderate at the time of the survey. The creek's banks are somewhat unstable and eroding in some areas. The substrate consists of silt and sand. There is an existing construction project across this stream and much of the riparian buffer has been cleared. Stream 11 is not listed as a trout stream and is not listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses. The proposed project would not impact Stream 11. A stream buffer variance would not be required for Stream 11.

Stream 12, is a perennial stream located approximately 100 feet beyond the northeastern end of the project corridor, southeast of the intersection of SR 54 and US 19/US 41/Tara Boulevard. This medium quality stream has a bankfull width of approximately three to five feet and bankfull depth of one to two feet. Flow was low to moderate at the time of the survey. The creek's banks are somewhat unstable and eroding in some areas. The substrate consists of silt and sand. The riparian buffer has been cleared with the exception of a surrounding 10-foot wide portion consisting of mostly sweetgum and mimosa. Stream 12 is not listed as a trout stream and is not listed on Georgia's 303(d) List of Streams Not Fully Supporting Designated Uses. Stream 12 is not inside the proposed corridor and the proposed project would not impact Stream 12. A stream buffer variance would not be required for Stream 12.

b) Open Waters

Two open waters were identified along the project corridor (see Figure 32 and Table 8b). Open water findings are discussed below:

Pond 9 is a large residential pond located southeast of SR 54 across from the SR 54 and Whaleys Lake Trail intersection approximately 120 feet from the existing edge of pavement. No streams flow in or out of the pond, although the pond appears to be diked and connected to an adjacent impoundment. The pond is relatively shallow and appeared to be below normal levels at the time of the survey. The buffer

consists of mowed and maintained grasses with no other vegetation present. The pond appears to be stocked with fish. During the survey, Canada geese (*Branta canadensis*), a belted kingfisher (*Megaceryle alcyon*), a green heron (*Butorides virescens*), and turtles were observed in and around the pond. The pond's substrate consists of silt and sand. The proposed project would not impact Pond 9; however, a buffer variance would be required for impacts to the pond's 25-foot buffer.

Pond 13 is a small detention pond located approximately 250 feet beyond the northeastern end of the project corridor, southeast of the intersection of SR 54 and US 19/US 41/Tara Boulevard. No streams flow in or out of the pond, although the pond does have an overflow drain which may deposit into the pipe containing Stream 12. The pond is fully vegetated with no wrested vegetation present. The buffer consists of mowed and maintained grasses and planted ornamentals. The proposed project would not impact Pond 13 as this resource is outside the project corridor. Based on the lack of wrested vegetation, no state buffer is present. Therefore, a buffer variance would not be required.

Indirect Effects

Indirect effects are expected to occur as development throughout this corridor continues. However, streams should be better protected from development than in the past because of the Environmental Protection Division (EPD) requirements. Where applicable, stream buffers would be preserved to further protect streams and open waters by absorbing run off, stabilizing the soil, and catching debris and pollutants while variances would be required for unavoidable impacts.

Cumulative Effects

Cumulative effects would likely continue as this corridor is transformed. With the continued growth of both counties and the resulting developments, cumulative impacts to wetlands and streams would continue to develop; however, through mitigation and restoration efforts, these impacts should result in minor loss. The streams along the corridor currently serve as overflow for Morning Creek, Camp Creek, and the Flint River which are 303(d) listed streams. Of the nine streams identified along the project

corridor, two streams have been impacted by earlier improvements. Stream 2 appeared to be previously disturbed by road construction and Stream 3 by the construction of an adjacent subdivision. Wetlands 4 and 6 have been previously impacted as a result of the 1997 bridge replacement projects over Camp Creek, Morning Creek, and the Flint River. In addition, the placement of power lines and the large swath of ROW associated with the transmission lines have also impacted these wetlands. Over time, continual disturbance of these wetlands would result in degradation of quality to water resources as well as available habitat for threatened and endangered species. However, erosion control methods are in place to minimize these impacts.

Waters of the US are regulated by federal and state programs, including Section 404 of the Clean Water Act and Georgia Erosion and Sedimentation Control Act. The US Army Corps of Engineers (USACE) has a policy to mitigate impacts to wetlands so that little to no net loss of wetlands would result.

c) Measures to Avoid and Minimize Impacts

In accordance with Section 404(b)(1) guidelines, alternatives were considered in order to avoid and minimize impacts to waters of the U.S. The National Environmental Policy Act, other acts, and regulations require that a number of additional environmental factors be taken into account. The alignment for the proposed project was developed by the Office of Road Design in conjuction with Offices of Program Delivery and Environmental Services that, as a standard procedure, includes all environmental considerations as a part of the location investigation prior to laying out a proposed alignment. Basic data of the corridor was gathered and studied. Data for the project included, at a minimum, aerial photography, topographic maps, traffic (existing and projected), previous studies, wetland inventory maps, soil survey maps, floodplain maps, and Georgia Department of Natural Resources historic resource survey maps.

Measures During Planning

Alternatives to avoid impacts to waters of the U.S. associated with the proposed project were considered. The proposed project proposes to widen SR 54 and construct parallel bridges over Morning

Creek, Camp Creek, and the Flint River. The widening would occur along the existing alignment of SR 54. Three perennial streams along the project corridor (Streams 5, 7, and 8) are large features that would be bridged. The remaining two perennial streams (Streams 11 and 12) would not impacted by the proposed project. Stream 3 is located just outside of ROW and would not be impacted. Wetlands 4 and 6 would be impacted by the proposed project; however, these systems are perpendicular to the alignment and cannot be avoided by shifting from the existing alignment. Ephemeral Channels 1 and 10 and Stream 2 are also features that are perpendicular to the existing alignment and would not be avoided by a shift. Neither pond would be impacted by the proposed project.

Measures During Construction

This project would be expected to produce some increased siltation within the wetlands and stream crossings during the construction phase. Environmental harm would be minimized by standard construction erosion and sedimentation control devices. Measures to minimize harm to wetlands, water quality, wildlife, and fish and game habitat include:

1. Preservation of roadside vegetation beyond the limits of construction where possible;
2. Early revegetation of disturbed areas so as to minimize soil erosion;
3. The use of slope drains, detention/retention structures, surface, sub-surface and cross drains, designed as appropriate or needed, so that discharge would occur in locations and in such a manner that surface and sub-surface water quality would not be affected (the outlets may require aprons, bank protection, silt basins and energy dissipaters);
4. Inclusion of construction features for the control of predicted erosion and water pollution in the plans, specifications and control pay items (GDOT Standard Specification 715 identifies the pollution control measures which may be used);
5. The dumping of chemicals, fuels, lubricants, bitumens, raw sewage, or other harmful wastes into or alongside streams or impoundments, or into natural or manmade channels leading thereto, would be prohibited.

Compliance with terms of the National Pollutant Discharge Elimination Discharge System NPDES) permit for construction activities to include preparation and submittal of project Notice of Intent (NOI) and notice of termination (NOT). The NPDES permit also requires preparation and implementation of an Erosion, Sedimentation, and Pollution Control Plan and a Comprehensive Monitoring Program. Best management practices outlined in the Erosion, Sedimentation, and Pollution Control Plan must be consistent with, and no less stringent than, practices set forth in the *Manual for Erosion and Sediment Control in Georgia.*

Mitigation

According to the SOP, GDOT is required to mitigate for all impacts on projects that have greater than 100 linear feet of stream impacts or 0.1 acre of wetland impacts. The proposed project would result in 96 feet of impacts to streams (not including ephemeral channels). These impacts would require 264 stream mitigation credits. The project would also result in 2.761 acres of wetland and ephemeral channel impacts which would require 20 wetland mitigation credits. The stream and wetland mitigation credits would be withdrawn from a USACE approved mitigation bank.

3. Floodplains

Direct Effects

An encroachment on the regulatory floodway associated with Morning Creek, Camp Creek, and the Flint River would occur as a result of the proposed widening of SR 54 and associated bridges (see Figure 33). The roadways and bridges would be designed to minimize impacts on this regulatory floodway. A No-rise certification would be required for this project. The No-rise certificate ensures that a proposed improvement within special flood hazard areas will not increase surface water elevations. Procedures for Coordinating Highway Encroachments on Floodplains with the Federal Emergency Management Agency are being followed, and the Georgia Department of Natural Resources has been notified of the project's involvement.

Indirect and Cumulative Impacts

The proposed project would encroach upon the regulatory floodway associated with Morning Creek, Camp Creek, and the Flint River. Increases in runoff discharge due to increased impervious surface areas could indirectly impact floodplains and regulatory floodways. In keeping with procedures for Coordinating Highway Encroachments on Floodplains with the Federal Emergency Management Agency measures would be taken to minimize cumulative flood-plain impacts associated with the action, and to restore and preserve the natural and beneficial floodplain values impacted by the action. All efforts will be made to ensure that the proposed highway action is consistent with existing watershed and floodplain management programs in the affected watershed and to ensure that the proposed project does not increase surface water elevations.

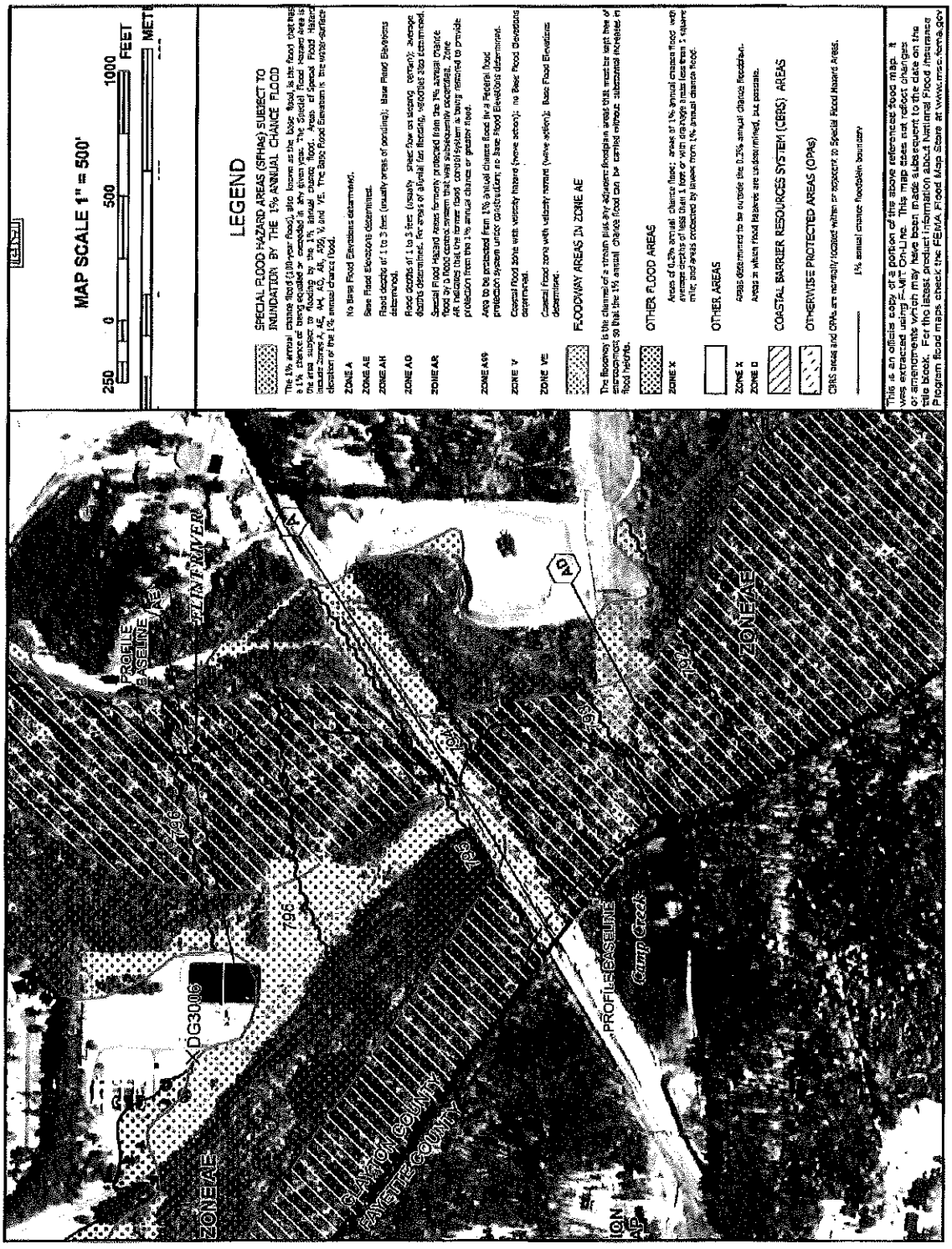


Figure 26 – Floodplain Map in Project Area

4. Farmland

Direct Effects

Georgia DOT has initiated early coordination with the Natural Resources Conservation Service (NRCS) in a letter dated July 5, 2010 to determine the proposed project's involvement with farmland as defined in the Farmland Protection Policy Act, 7 CFR Part 658 (See Appendix G, Agency Coordination). In addition, the Clayton County Comprehensive Plan was consulted in an effort to determine land use along the project corridor. Per the 2005-2025 Comprehensive Plan, no prime farmland is located along the project corridor (see Figure 27). While Fayette County does not have a map depicting the prime farmlands, the existing and future land use maps were consulted in the area of the proposed project to determine farm land involvement. Land currently designated for agricultural use along the Fayette/Clayton boundary would become conservation areas as depicted in the 2004 – 2025 future land use map.

Indirect Effects

As the project corridor and surrounding areas are primarily zoned for residential use as depicted in the existing and future land use plans for both Clayton and Fayette counties, there will be very minimal indirect impacts on farmland in this already urbanized area. There is very minimal undeveloped land along the project corridor, and most land currently zoned for agricultural use retain that designation.

Cumulative Effects

In the 1990's, Clayton and Fayette counties had large amounts of undeveloped land. During the past decade, increasing development pressure and population growth in the metropolitan Atlanta region stimulated substantial development throughout the counties. In Clayton County, the largest concentrations of undeveloped land are located in the southern Panhandle and northeast corner of the county near the Rex and Ellenwood communities. In Fayette County, the undeveloped land is mainly in the southern end of the county. These lands are generally characterized by small farms, plant nurseries, commercial timber, pulpwood harvesting or large residential lots with associated horse or cattle raising/grazing. All of these

properties are participating in the Conservation Use Covenant with the county. Approximately 24,701 acres are under the Conservation Use Covenant. Undeveloped land comprises 23.2 percent of the land area. Some of these large undeveloped tracts contain agricultural and forest lands but are not participating in the Conservation Use Covenant with the county. The Clayton and Fayette county Comprehensive Plans depict land use changes anticipated through 2025. As earlier stated, areas currently zoned as agricultural/conservation areas retain that use. As a result, this project will not have any significant cumulative impact on farmaland.

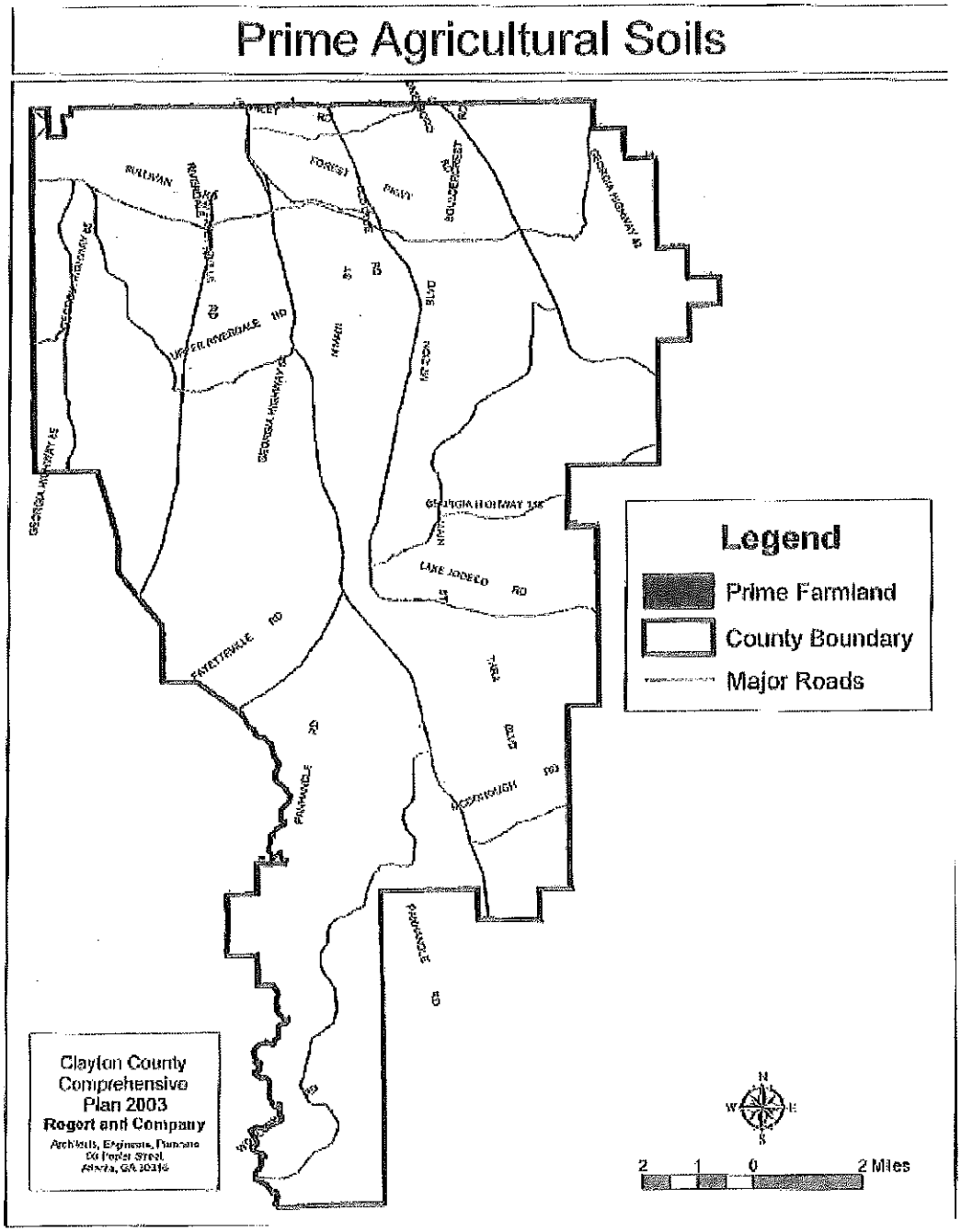


Figure 27 – Clayton County Prime Agricultural Soils

5. Threatened and Endangered Species

The United States Fish and Wildlife Service (USFWS) County Listing of Threatened and Endangered Species in Fayette and Clayton Counties, the Georgia Department of Natural Resources County Listing of Locations of Special Concern Animals, Plants and Natural Communities in Fayette and Clayton Counties, Georgia, and the GDNR Listing of Locations of Special Concern Animals, Plants and Natural Communities by Quarter Quad for the Fayetteville and Hampton USGS 7.5 Minute Topographic Quads were reviewed to determine the proposed project's potential impact to protected species in Fayette and Clayton Counties (Table 9). Early coordination with the USFWS and GDNR concerning the presence of known occurrences of protected species within the project area was initiated on July 5, 2007. USFWS responded in an email on July 5, 2007. GDNR responded in a letter dated July 22, 2007. See Appendix A for copies of correspondence.

Pursuant to the Endangered Species Act of 1973, pedestrian surveys were conducted in July and August 2007 to identify protected individuals and/or potential habitat for protected individuals within the project corridor. An aquatic survey was conducted from April 29 to May 1, 2008 to identify individuals and/or potential habitat for protected aquatic species. Species descriptions for federally listed species in Fayette and Clayton Counties, state-listed species known to occur within three miles of the project, and the results of the pedestrian and aquatic surveys are discussed below.

Discuss habitat for the species.

Table 9 Listed Species Known to Occur in Clayton and Fayette Counties

Common Name *Faunal / Floral Species*	Scientific Name	Federal Status	Habitat *Summarize habitat or state "None"*	Habitat Available *Yes or No*	Species Impact Expected *"No Effect", "Not Likely to Effect", "Will Adversely Effect"*
Wood stork	*Mycteria americana*	E	Cypress or mangrove swamps, freshwater marshes, narrow tidal creeks, or flooded tidal pools. Ideal feeding habitats are those that have flooded and then dried, creating	No	No Effect

			pools with high concentrations of fish trapped by falling water levels.		
Highscale Shiner	*Notropis hypsilepis*	N	Flowing areas of small to large streams over sand or bedrock substrates.	Yes	No significant adverse affect
Gulf moccasinshell mussel	*Medionidus pencillatus*	E	Sand and gravel substrate in sections of medium-sized creeks to large rivers with slow to moderate current.	No	No Effect
Oval pigtoe mussel	*Pleurobema pyriforme*	E	Medium-sized creeks to small rivers in sections of slow to moderate current with a silty sand or sand and gravel substrate.	No	No Effect
Shinyrayed pocketbook mussel	*Hamiota subangulata*	E	Preferred habitat for the shinyrayed pocketbook is in medium-sized creeks to rivers in sections of slow to moderate current with a clean sand or silty sand substrate.	No	No Effect

Key: T = Threatened; E = Endangered; N = Not Federally Listed

[If state species are indicated, include the following]

Direct Effects

Wood stork (*Mycteria americana*)

The wood stork is state and federally listed as endangered. These large wading birds have a breeding range that includes the southeastern U.S. and extends into South America. Breeding colonies are limited to the Coastal Plain in Georgia although individuals sometimes wander north into the Piedmont. The wood stork is a large, long-legged wading bird that is 33 to 44 inches in height and has a wingspan of 59 to 65 inches. It has a large, down-curved bill, and its plumage is white with black on its wing tips and the trailing edges of its wings. The neck and head of adults is not feathered. Wood storks inhabit freshwater and brackish wetlands in the southeast. This species usually nests in cypress or mangrove swamps, and forages in freshwater marshes, narrow tidal creeks, or flooded tidal pools. Ideal feeding habitats are those that have flooded and then dried, creating pools with high concentrations of fish trapped by falling water levels.

No wood storks were observed during the field survey. The project corridor is outside of the breeding range of this species. Although some suitable foraging habitat (freshwater wetlands) is present along the project corridor, the known occurrences of this species are isolated incidences of vagrants wandering north. It is therefore, highly unlikely that wood storks would utilize the wetlands along the project corridor as foraging habitat. The proposed project is anticipated to have no effect on the wood stork.

Highscale shiner (Notropis hypsilepis)

The highscale shiner is state listed as rare and is not federally listed. This small minnow has a distribution near and above the Fall Line in the Chattahoochee and Flint River systems in Georgia and Alabama. The highscale shiner grows up to 5.2 centimeters in length and has a slender, moderately compressed body, subtriangular head, blunt snout, and small inferior mouth. Overall it is lightly colored, with a weakly developed midlateral stripe. A wedge-shaped basicaudal spot is present and separated from the lateral stripe by a light interspace. The lateral line is complete, anterior scales are significantly taller than wide, lateral scale rows number 35 or 36, predorsal scales usually number 5, and 7 anal rays are present. Preferred habitat consists of flowing areas of small to large streams over sand or bedrock substrates.

An aquatic survey was conducted in April and May 2008 to determine the presence of this species or suitable habitat for this species within the project area. This species has been documented on-site by GDNR within Camp Creek; however, no specimens of the highscale shiner were collected or observed during the aquatic survey. Although instream conditions of Camp Creek are degraded, preferred habitat of the highscale shiner occurs within the area covered during the aquatic survey. Given the on-site record and the presence of suitable habitat special provisions would be implemented to avoid impacts to this species. The proposed project is anticipated to have "no significant adverse affect" on the highscale shiner.

Gulf moccasinshell (*Medionidus pencillatus*)

The Gulf moccasinshell mussel is state and federally listed as an endangered species. This small mussel, historically occurred in the lower Apalachicola-Flint-Chattahoochee (ACF) River Basin, as well as, in the Chipola, Choctawhatchee, and Yellow Rivers in Alabama and Florida, and Ecofina Creek in Florida. Most remaining occupied habitat is in Flint River tributaries, with a very few additional sites in the lower Chattahoochee and Chipola systems. The Gulf moccasinshell is rhomboidal in shape and reaches a length of approximately 2.2 inches. The shell is yellowish to greenish brown with narrow, green rays. The nacre is smoky purple or greenish and slightly iridescent on the posterior surface. Preferred habitat for the Gulf moccasinshell is in area of sand and gravel substrate in sections of medium-sized creeks to large rivers with slow to moderate current.

An aquatic survey was conducted in April and May 2008 to determine the presence of this species or suitable habitat for this species within the project area. No individuals were found during the aquatic survey. In addition, due to severe sedimentation, unstable substrates, poor water quality conditions, and adjacent land uses, no potential habitat occurs for this species within the project area. Therefore, the proposed project would have no effect on the Gulf moccasinshell.

Oval pigtoe (*Pleurobema pyriforme*)

The oval pigtoe mussel is state and federally listed as an endangered species. The oval pigtoe is a small to medium-sized mussel that historically occurred in abundance in the lower Apalachicola-Flint-Chattahoochee (ACF) River Basin, as well as, in the Suwanee/Sante Fe Rivers and Ecofina Creek in Florida. Present distribution is limited to the Flint and lower Chattahoochee systems in Georgia, the Ochlockonee in Georgia and Florida, and the Chipola and Sante Fe in Florida. The mussel has a suboviform compressed shell that reaches a length of about 60 millimeters. Its shiny, smooth shell is yellowish, chestnut, or dark brown with no rays, but with distinct growth lines. The nacre is iridescent toward the rear, and its color ranges from salmon to bluish white. Preferred habitat for the oval pigtoe is in

medium-sized creeks to small rivers in sections of slow to moderate current with a silty sand or sand and gravel substrate.

An aquatic survey was conducted in April and May 2008 to determine the presence of this species or suitable habitat for this species within the project area. No individuals were found during the aquatic survey. In addition, due to severe sedimentation, unstable substrates, poor water quality conditions, and adjacent land uses, no potential habitat occurs for this species within the project area. Therefore, the proposed project would have no effect on the oval pigtoe.

Shinyrayed pocketbook (*Hamiota subangulata*)

The shiny-rayed pocketbook mussel is state and federally listed as an endangered species. It is a medium-sized mussel that historically occurred in abundance in the lower ACF Basin. It is currently only known from only two Chattahoochee tributaries sites, from a few Chipola River sites, from a few Ochlockonee sites, and from several Flint River sites (mostly tributaries). The mussel has a subelliptical shell that reaches a length of about 85 millimeters. Its shiny, smooth shell is light yellowish-brown with wide emerald green rays. In older mussels, the shell becomes darker brown and the rays less distinguishable. The nacre is white with occasional salmon tinting. Preferred habitat for the shinyrayed pocketbook is in medium-sized creeks to rivers in sections of slow to moderate current with a clean sand or silty sand substrate.

An aquatic survey was conducted in April and May 2008 to determine the presence of this species or suitable habitat for this species within the project area. No individuals were found during the aquatic survey. In addition, due to severe sedimentation, unstable substrates, poor water quality conditions, and adjacent land uses, no potential habitat occurs for this species within the project area. Therefore, the proposed project would have no effect on the shinyrayed pocketbook.

Based on the findings of the surveys done to locate the above listed species, the proposed project would have no known direct effects on the above listed species in Clayton and Fayette Counties.

Indirect Effects

The proposed project is located within an urban area. Although suitable habitat for the highscale shiner exists and has been documented on-site by GDNR within Camp Creek in Clayton County, special provisions would be followed to prevent direct impacts to this species. As a result, potential impacts would be minimized. Suitable habitat for the remaining species is not present along the project corridor. As a result, the proposed project is not anticipated to result in any reasonably foreseeable indirect impacts to other protected species in Clayton and Fayette Counties.

Cumulative Effects

The proposed project is located within an urban area and is not expected to induce impacts to protected species or the habitat in which they reside within Clayton and Fayette Counties. With the exception of the highscale shiner, suitable habitat for the remaining species in Clayton and Fayette Counties is not present along the corridor. Severe sedimentation of water resources, unstable substrates, and poor water quality conditions exist along the corridor resulting in less than optimal conditions in which these species could reside. In addition, wetlands as well as some streams along the project corridor have been previously impacted as a result of road or residential construction.

6. Migratory Bird Habitat

As directed under Executive Order 13186, in furtherance of the Migratory Bird Treaty Act (16 U.S.C. 703-711), actions must be taken to avoid or minimize impacts to migratory bird resources and to prevent or abate the detrimental alteration of the environment for the benefit of migratory birds, as practicable.

Georgia DOT has adopted a policy of identifying tracts of contiguous habitat of 100 or more acres. The 100 acres is considered a sufficient size to allow the sensitive species to avoid predation and parasitism from species which would only penetrate a certain distance within a given habitat. In addition, GDOT surveys under bridges and large culverts which would be reconstructed or removed as part of a

proposed project. If birds such as the barn swallow (*Hirundo rustica*) are observed nesting under the bridge or culvert, demolition or reconstruction of that structure would be scheduled to take place at a time when the nest is not being used.

Direct Effects

During the field survey, no area of contiguous habitat of 100 acres or more was observed. Eastern phoebes (Sayornis phoebe) and barn swallows were observed nesting under the existing bridge over Morning Creek, Camp Creek, and the Flint River. However, the proposed project would not involve demolition of these bridges or other construction that would impact these nests. Therefore, the proposed project would not impact migratory birds or their habitat.

Indirect Effects

The proposed project is located in an urban area where large tracts of contiguous forested habitat are not present. Additionally, the proposed project is not expected to stimulate growth or development that would result in forest habitat loss. Therefore, the proposed project would not result in any reasonably foreseeable indirect impacts to migratory birds or their habitat.

Cumulative Effects

The proposed project is located in an urban area where large tracts of contiguous forested habitat are not present. While development and growth throughout Clayton and Fayette Counties is likely, the proposed project is not expected to stimulate growth or development that would result in additional forest habitat loss. Therefore, the proposed project would not result in any reasonably foreseeable indirect impacts to migratory birds or their habitat.

7. Invasive Species

As directed by Executive Order 13112, a survey for populations of invasive species that may be spread during construction was conducted for this project. The invasive species for which the survey was conducted are those which have been identified by the GDOT as having the highest priority due to environmental and economic impacts caused by those species. Both the selected species and the management practices specified would be re-evaluated and revised as appropriate as more information is obtained.

Invasive species identified during a pedestrian survey of the proposed project corridor include Chinese privet, Chinese wisteria (Wisteria sinense), Japanese honeysuckle (Lonicera japonica), kudzu, mimosa (Albizia julibrissin), and Nepalese browntop.

During the construction process, the GDOT would take measures to prevent or minimize the spread of invasive species as appropriate for the time of the year. These measures would include removal and disposal of vegetative parts in the soil that may reproduce by root raking prior to moving the soil, burning on site any such parts and aboveground parts that bear fruit, controlling or eradicating infestations prior to construction, and cleaning of vehicles and other equipment prior to leaving the infested site. The measures used would be those that are appropriate for the specific site conditions which exist on the project, as described in the Georgia Standard Specifications Section 201, Clearing and Grubbing of ROW.

E. Effects on the Physical Environment

1. Noise

The original noise/air noise findings from 1997 have been incorporated in this DEA with a commitment to update them in the final EA. At the time of writing this DEA in July 2010, updated noise/air studies are underway. To date, no noise abatement has been proposed due to access breaks, and no effects changes are anticipated as a result of the ongoing study. The noise studies will be updated from

stamina to TNM 2.5. The findings below reflect the previously used standard of measurement (L10, though which still acceptable today) which will be updated to the current standard when the noise study is complete. The final EA will document recent standards.

Two methods are used for predicting noise impacts. The first is a comparison of predicted noise levels with the noise abatement criteria established by 23 CFR Part 772. A 70-dBA L10 criterion has been established for schools, libraries, residences, churches, playgrounds, and recreational areas and a 75-dBA L10 criterion has been established for commercial activities. Any predicted noise level that approaches or exceeds the applicable noise abatement criterion is considered an impact. "Approach" is defined as within 1 dBA of the noise abatement criterion. Under the build scenario, two residential sites would be impacted on the basis of approaching or exceeding the 70-dBA exterior residential noise abatement criterion, and under the no-build scenario, one residential site would be impacted. No businesses would be impacted on the basis of their 75-dBA exterior noise abatement criterion.

The second method of determining noise impacts involves the amount of increase from the existing noise levels to the predicted future noise levels. A substantial impact occurs when there is a 10 decibel increase from existing levels and noise levels exceed 57 decibels. Locations, existing noise levels and future noise levels for the build and no-build conditions, and the amount of noise increase are shown below:

Table 10 – Noise Impact Levels

Location	Existing Noise, L10 dBA	Predicted Noise Build	Predicted Noise-No Build	Change Build	Change No-Build
Impact Site 1	74	71	75	-3	1
Impact Site 2	65	71	66	6	1

Noise abatement was considered for those sites predicted to be impacted. Among the types of abatement considered were the following:

a) Abatement Barriers – Among the most common are earth berms and free-standing walls. These kinds of abatement measures would not be feasible for this project because there would not be full control of access. Openings required for points of access (e.g. driveways, cross streets) would render a barrier ineffective.

b) Acquisition of Rights-of-way – The acquisition of rights-of-way to create buffer zones would result in disruptive relocations.

c) Traffic Management – Measures such as traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain types, and modified speed limits would prevent the project from serving its intended purpose. Exclusive lane designations would be inaapropriate for a project of this scope and would not reduce traffic noise levels.

d) Alteration of Horizontal and Vertical Alignments – Alignment modifications as a means of noise abatement would be infeasible for this project.

Please refer to Appendix A for the Noise Impact Assessment.

2. Air

Direct Effects

The Clean Air Act section 176(c) requires that Federal transportation projects are consistent with state air quality goals, found in the State Implementation Plan (SIP). The process to ensure this consistency is called Transportation Conformity. Conformity to the SIP means that transportation activities would not cause new violations of the national ambient air quality standards (NAAQS), worsen existing violations of the standard, or delay timely attainment of the relevant standard. A direct effect of the proposed road widening would be a reduction in vehicle idling as a result of congestion as there would be added capacity to the roadway to accommodate existing and additional thru traffic.

Carbon Monoxide

This project was evaluated for its consistency with state and federal air quality goals. Results indicated that the project is consistent with the State Implementation Plan for the attainment of clean air quality in Georgia and is in compliance with both state and federal air quality standards.

For this project, the predicted peak one-hour concentration of carbon monoxide, 2.6 parts per million (ppm), was below state and federal standards for one-hour averaging time (35 ppm). Also, because this concentration was less than the eight-hour standard of 9 ppm, an eight-hour concentration was not calculated. Refer to Appendix H for the complete Air Quality Impact Assessment.

Ozone

This project is in an area where the State Implementation Plan (SIP) contains Transportation Control Measures (TCM's) for serious ozone non-attainment for air quality. On September 26, 2007, the Atlanta Regional Commission (ARC) adopted the FY 2008- FY 2013 Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) for the Atlanta region. The proposed project is included in a conforming TIP and RTP and, therefore, conforms to the SIP. The project is identified in the TIP as Project Code CL 041. (See Appendix H – Air Quality Assessment).

Particulate Matter$_{2.5}$ ($PM_{2.5}$)

An interagency group consisting of representatives from the U.S. Environmental Protection Agency (EPA), FHWA, Georgia Environmental Protection Division (EPD), and the local Metropolitan Planning Organization(s) (MPO) reviewed this project. The interagency group has determined that this project is not a project of air quality concern under 40 CFR 93.123(b) (1). The Clean Air Act and 40 CFR 93.116 requirements were met without a hot spot analysis. Documentation of this determination made on July 17, 2007 is provided in Appendix A.

Mobile Source Air Toxics

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection

Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2007 EPA rule mentioned above requires controls that would dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 35.

Based on the example projects defined in the FHWA guidance "Interim Guidance Update on Air Toxic Analysis in NEPA Documents" dated September 30, 2009, the widening of State Route 54 would be classified as a project with Low Potential MSAT Effects.

Qualitative MSAT Analysis

For both the build and no-build alternative in this EA the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the Build Alternative is the same for the No Build Alternative (See Table 11). Any possible increase in VMT would lead to higher MSAT emissions for the

action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. Any emissions increase would be offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases would offset VMT-related emission increases cannot be reliably projected due to the inherent deficiencies of technical models.

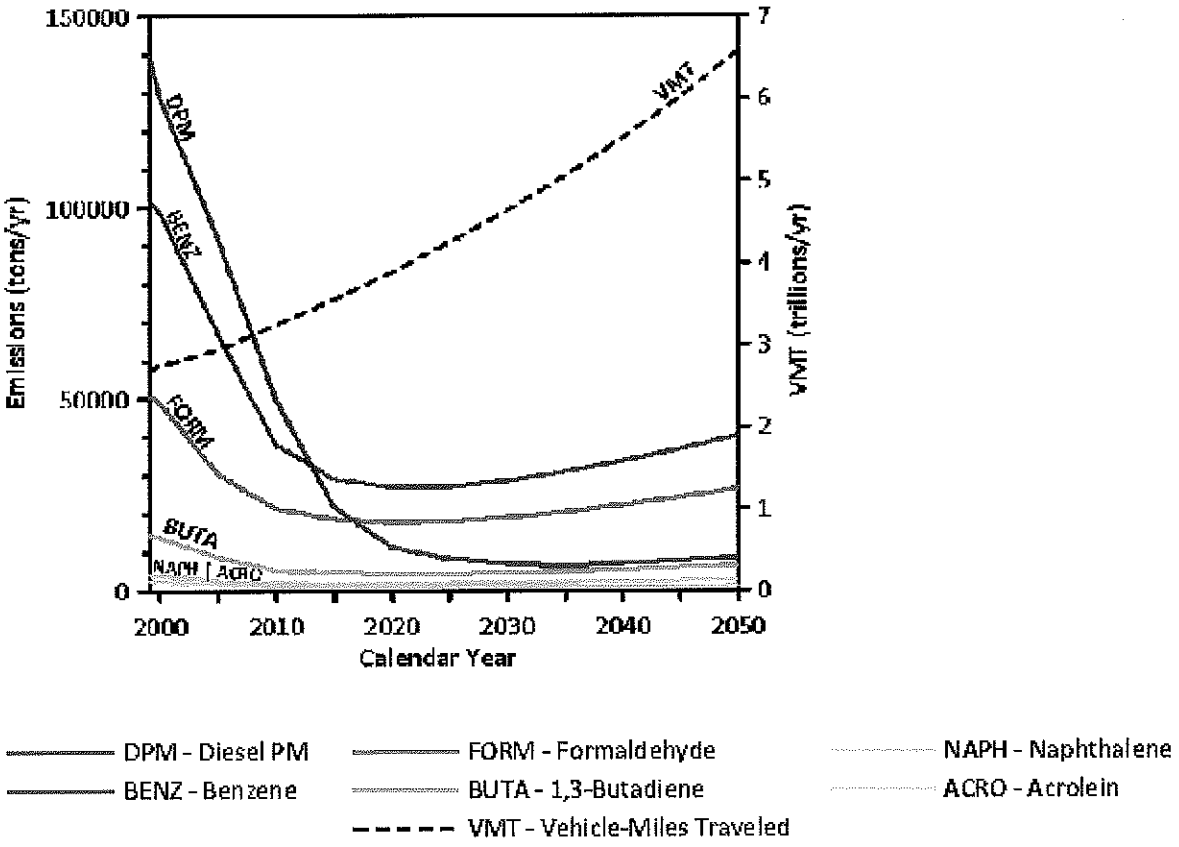


Figure 28 – NATIONAL MSAT EMISSION TRENDS 1999 - 2050 FOR VEHICLES OPERATING ON ROADWAYS USING EPA's MOBILE6.2 MODEL

Table 11: Vehicle Miles Traveled (VMT)

SR 54

	2013	No Build 2033	2033
ADT	11840	19380	19380
Number of Trucks	486	795	795
Truck Percentage	4.1%	4.1%	4.1%
Approximate VMT	62752	102714	102714

The estimated VMT for the Build Alternative in 2029 is equal to the No Build Alternative. As a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020, there is likely to be at least a slight reduction in MSAT emissions when the two factors are combined. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional turn lanes contemplated as part of the project alternatives would have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, under the Build Alternative there may be localized areas where ambient concentrations of MSATs could be higher for than the No Build Alternative. However, as discussed above, the magnitude and the duration of these potential increases compared to the No-build alternative cannot be accurately quantified due to the inherent deficiencies of current models. In sum, when a roadway is improved and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSATs would be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled

with fleet turnover, would over time cause substantial reductions that, in almost all cases, would cause region-wide MSAT levels to be significantly lower than today.

Indirect Effects

The long term purpose of this project is to reduce traffic congestion by adding capacity along SR 54 in Clayton and Fayette Counties. Although there would be added capacity to the roadway, congestion would be alleviated. Idling times of vehicles would be reduced or eliminated along this road segment. As a result, it is not likely that this project would result in significant changes to air emissions resulting from altered traffic patterns.

Cumulative Effects

The proposed project is included in a conforming Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) for the Atlanta region and, therefore, conforms to the State Implementation Plan (SIP). There are no cumulative impacts to air quality anticipated as a result of the proposed project.

The Air Report will be updated based on more recent traffic data, and findings will be documented in the Final Environmental Assessment.

3. Energy/Mineral Resources

Direct Effects

The construction of a transportation facility represents a considerable one-time expenditure of energy resources both in the fabrication of construction materials and in the actual roadway construction process. Large amounts of electricity are used in the intial preparation and fabrication of materials, whether derived from hydro or fossil fuel (coal) sources, but the chief energy concern today involves the depletion of crude oil resources. Although the use of large amounts of energy during construction and many construction materials themselves (plastics, asphalt, etc.) would require the consumption of crude oil, the net result of the project construction would be a long-term savings of this resource due to the decrease

or elimination of idling time associated with traffic congestion on the roadway for a no-build condition in the proposed project's design year .

Indirect & Cumulative Effects

The proposed improvements would allow for energy conservation by providing an efficient highway section that would help eliminate existing bottlenecks and promote a stable flow of traffic.

4. Construction/Utilities

Direct Effects

Construction of the proposed project would create unavoidable inconveniences to motorists, but construction activities would be conducted in a manner that would maintain access and minimize conflict with traffic. The safety and convenience of the general public and residents of the area would be provided for at all times. Any necessary relocation of utilities i.e., water, sewer, telephone, etc. would be accomplished with no long term interruption of services. All other required construction functions would be accomplished in a timely and orderly fashion so as to keep disruptions minimal, for short duration and so as not to compromise safety.

All phases of construction operations would temporarily contribute to air pollution. Particulates would increase slightly in the corridor as dust from construction collects in the air surrounding the project. The construction equipment would also produce slight amounts of exhaust emissions. The Rules and Regulations for Air Quality Control outlined in Chapter 391-3-1, Rules of Georgia Department of Natural Resources' Environmental Protection Division, would be followed during the construction of the project. These include covering earth-moving trucks to keep dust levels down, watering haul roads, and refraining from open burning, except as may be permitted by local regulations.

The EPA has listed a number of approved diesel retrofit technologies; many of these can be deployed as emissions mitigation measures for equipment used in construction. This listing can be found at: www.epa.gov/otaq/retrofit/retroverifiedlist.htm

Indirect Effects

There would be no indirect impacts as a result of the construction activities associated with the widening of the roadway.

Cumulative Effects

There would be no long term or permanent impacts as a result of the construction activities associated with the widening of the roadway.

5. UST's/Hazardous Waste Sites

Direct Effects

A survey for sites which may contain hazardous materials, including soil and/or water contaminated by leaking underground storage tanks, has been conducted for this project. One 1site which may contain underground storage tanks (UST's) was identified along the project corridor. Subsurface testing has been conducted to determine if any contaminants are leaking into the soil. Contamination was not encountered on this site. Therefore, tanks and/or pumps acquisition could proceed from this site. Every effort would be made to have the UST owner remove the tank from the required ROW prior to acquisition. Should it become necessary for the UST system on this site to be removed by the Office of ROW as a surplus property contract, they shall be handled in accordance with GDOT Standard Specifications for Construction, Section 217 – Removal of Underground Storage Tanks. At the time of writing this draft environmental assessment (July 2010), another UST investigation is underway, and results of this investigation would be documented in the subsequent final environmental assessment. Please refer to Appendix A for Results of UST Investigation.

Indirect Effects & Cumulative Effects

There are no indirect or cumulative effects of the proposed project on UST's and/or hazardous waste sites.

F. Permits/Variances

1. Section 404

The placement of fill material in waters of the United States requires a permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act of 1977. There are three levels of this permit, and the determination of the appropriate one is based primarily on the type of fill activity and the amount and location of fill involved. A Nationwide 14 with a preconstruction notification is required for this project.

2. Stream Buffer Variance

Impacts to the 25-foot buffers of Streams 5, 7, and 8 would result from project construction; however, these impacts would be exempt from the need for a stream buffer variance. A stream buffer variance would be required for impacts to the 25-foot buffer of Pond 9.

IV. SECTION 4(F) EVALUATION

Section 4(f) of the 1966 U.S. Department of Transportation (DOT) Act declared a national policy that special efforts be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges and historic sites. The Secretary of Transportation may approve projects that require the use of significant publicly owned parks, recreation areas, or wildlife and waterfowl refuges, or any significant historic site protected under Section 4(f) only if:

- There is no prudent and feasible avoidance alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the resource resulting from such use.

When such resources are affected, documentation of no feasible and prudent avoidance alternative and planning to minimize harm is included in the federal environmental document. A Section 4(f) use occurs:

- When land is permanently incorporated into a transporation facility;
- Where there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purposes; or

- When there is a constructive use of land (23 CFR 771.135[p])

Of the seven identified Section 4(f) resources, although there is temporary or permanent use of land within the eligible boundaries of the Blalock and Wallace Houses as discussed in the Section 4(f) applicability section on pages 98 – 100, only one historic resource, the Mundy House, is subject to Section 4(f) use as the proposed project will constructively use land from it as outlined in 23 CFR 771.135[p].

The alternatives section of the Section 4(f) document would be structured to discuss alternatives considered to avoid and/or minimize impacts to the Mundy House. For information and a discussion of effects to this resource, which result from the build alternative, refer to Section III, Environmental Consequences, Historic Resources (Mundy House: pgs. 60 & 89-94). The following is the evaluation of avoidance and minimization alternatives required under Section 4(f) for the proposed use of land from this resource.

Background

The Initial Alternative – "E"

In 1997, the initial alternative had no adverse effect to the Mundy House, a NRHP eligble resource. The proposed project design then consisted of the widening of SR 54 from just north of McDonough Road in Fayette County to US 19/US 41 in Clayton County. For the entire project length of 5.3 miles, the project would consist of widening the existing two-lane facility to an urban four-lane (12-foot lanes) section with a 24-foot raised median, 4-foot bike lanes, sidewalk, and a 16-foot shoulder on each side. All widening was to the west (Refer to Figure 5, Typical Section of Initial Design on page 20).

In 1997, the Wallace House was not a NRHP eligible resource. Because the history survey was over five years old, another one was done in 2007. The 2007 history survey identified the Wallace House as a NRHP eligible resource. The Initial Alternative was then shifted to the east holding the edge of ROW on the west side of SR 54, to avoid the Wallace House which had greater sturctural integrity than the Mundy House and was still occupied and in use. This shift resulted in an adverse effect to the Mundy

House, located at 8968 Fayetteville Road in Jonesboro, GA, hence the need to address section 4(f) and investigate possible avoidance alternatives to impacting this resource. Please refer to Figures 5, 36a & 36b for the Initial design alternative, now referred to as the Initial Alternative – E.

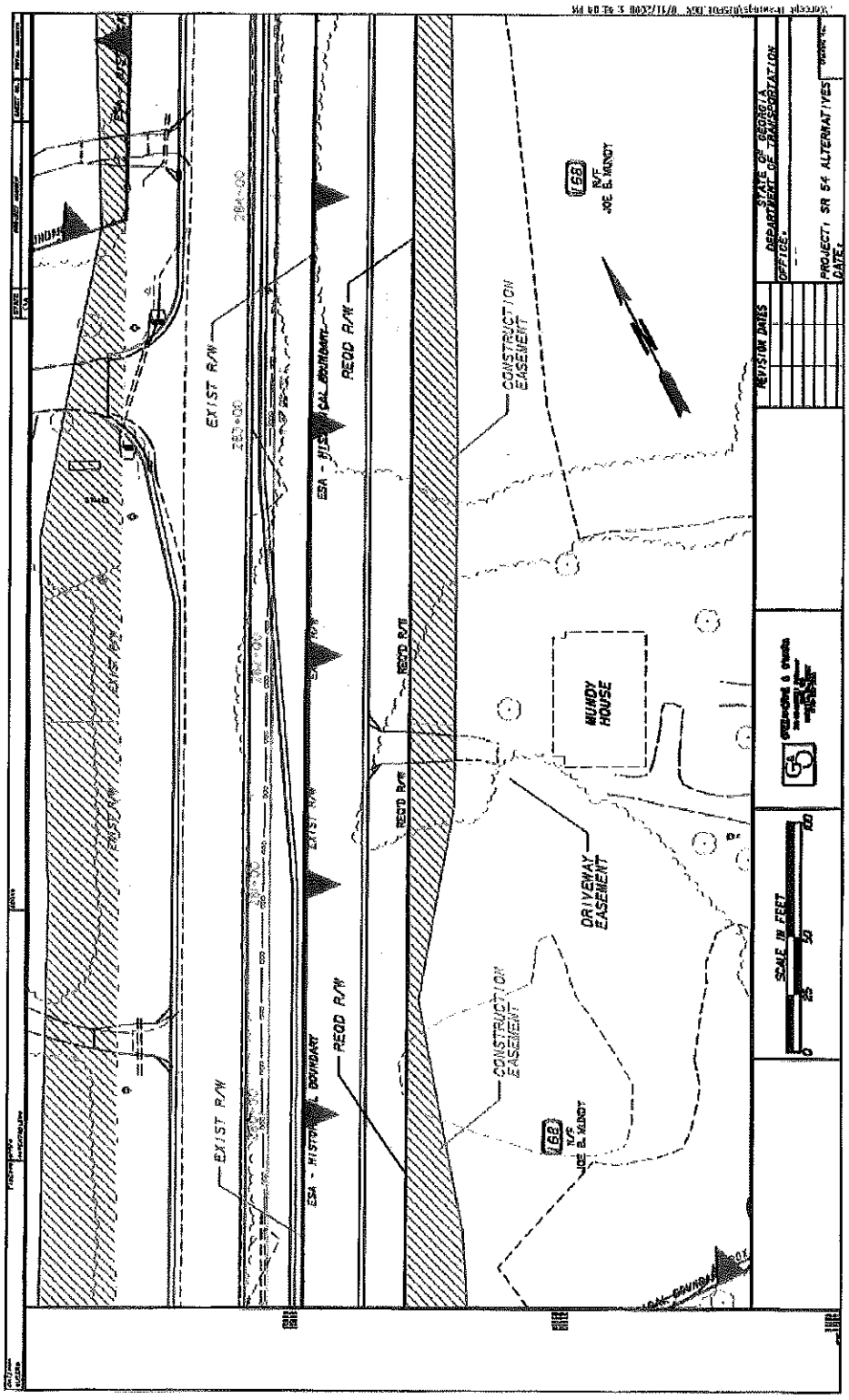


Figure 29a – Mundy House Site Impact of Initial Alternative (1)

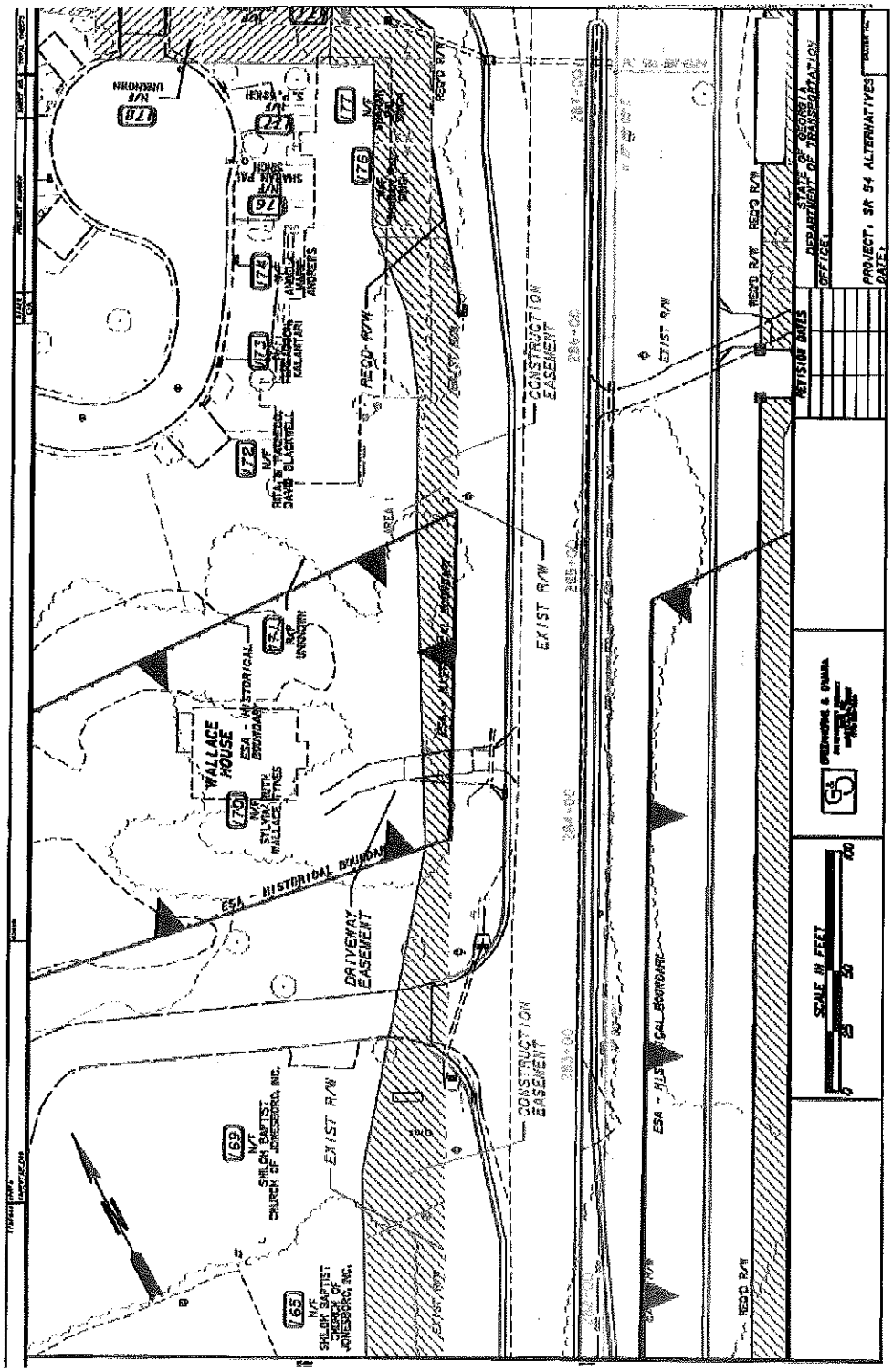
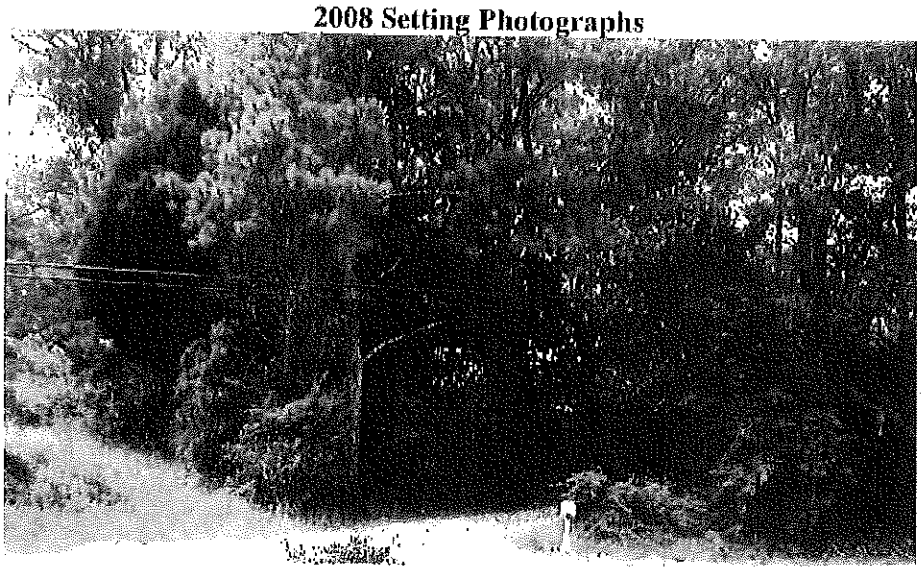


Figure 29b – Mundy House Site Impact of Initial Alternative (2)

THE MUNDY HOUSE
2008 Setting Photographs

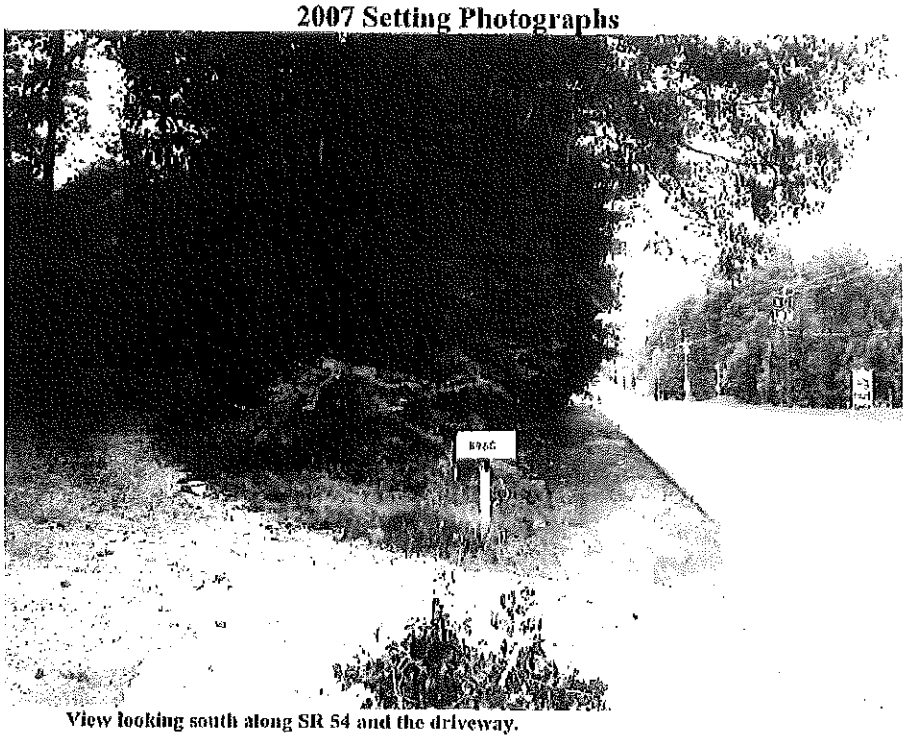


View looking southeast across SR 54 towards the driveway of the Mundy House.

View looking southeast across SR 54 towards the Mundy House (barely visible).

Figure 28a

THE MUNDY HOUSE
2007 Setting Photographs

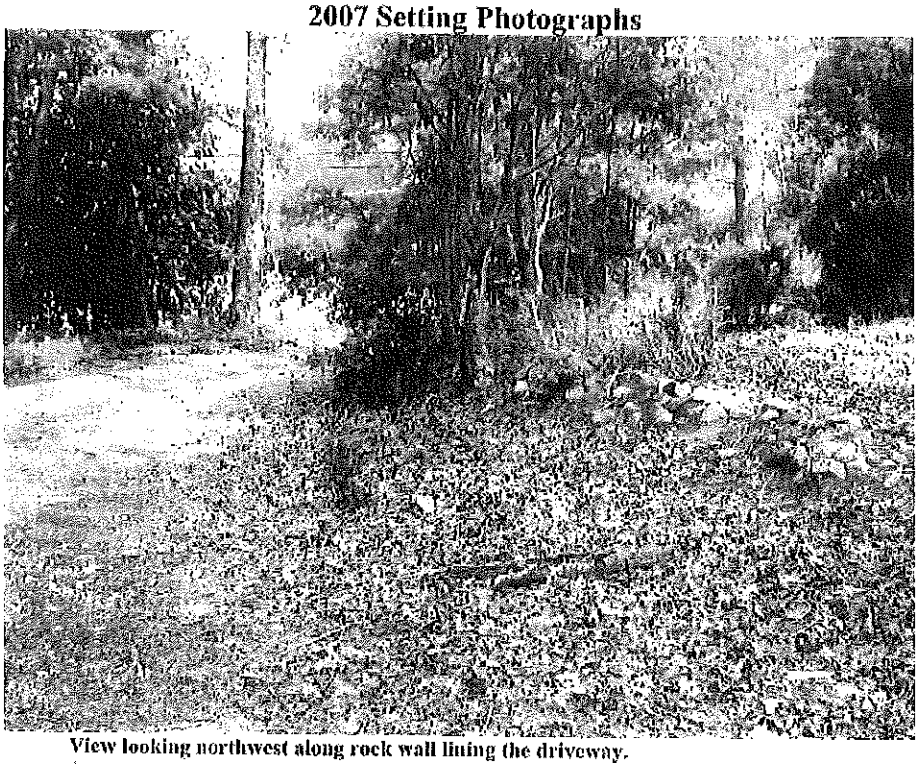


View looking south along SR 54 and the driveway.

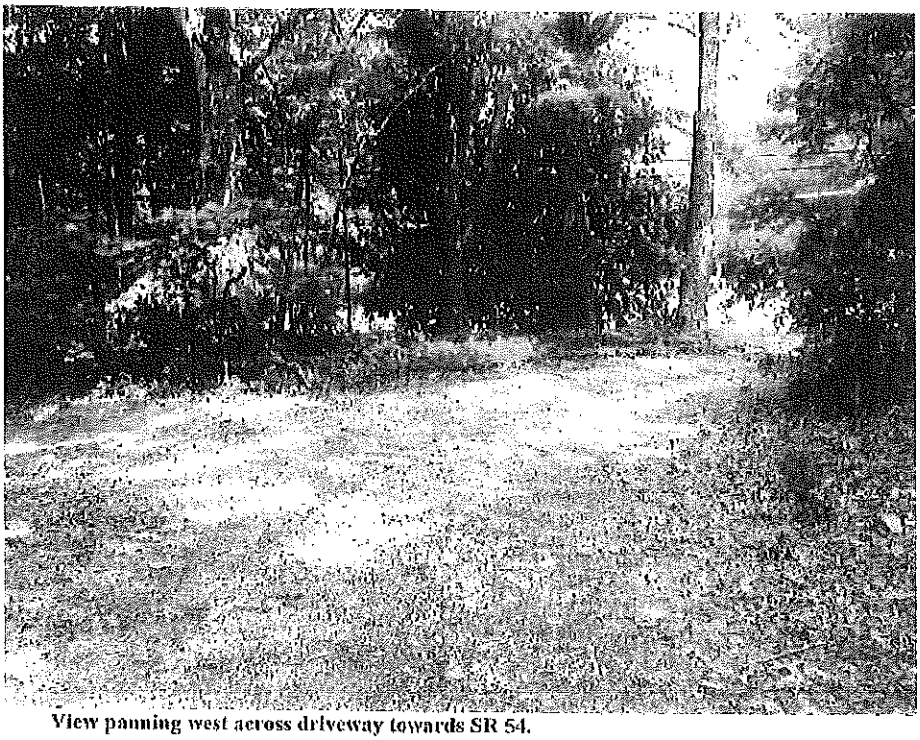
View looking south along driveway.

Figure 28b

THE MUNDY HOUSE
2007 Setting Photographs



View looking northwest along rock wall lining the driveway.

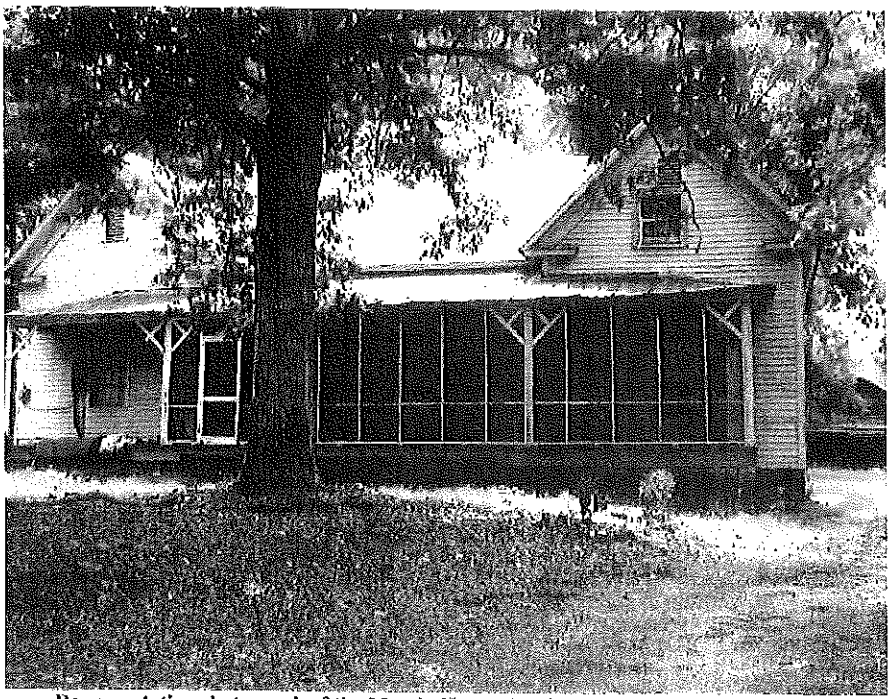


View panning west across driveway towards SR 54.

Figure 28c

THE MUNDY HOUSE
2008 Setting Photographs

View looking west towards SR 54 (not visible due through vegetation).



Representative photograph of the Mundy House, looking east towards the west façade.

Figure 28d

A. Alternatives to Avoid Involvement with Identified Section 4(f) Resource and Resultant Effects

The following alternatives were considered to avoid any use of land from the eligible historic resource, the Mundy House (see Figures 28a – 28d, Mundy House Setting Photographs):

1. No-Build Alternative

The GDOT would take no action to widen and improve SR 54. The no-build alternative would not have any adverse effects to the environment and the Mundy House. This alternative would not increase the traffic capacity or add sidewalks and bike lanes or address safety. This alternative would not alleviate congestion anticipated with increased traffic in the build and design years. However, this alternative would not satisfy the project's need and purpose of adding capacity to the roadway. For this reason, the No-Build Alternative was not considered a feasible alternative.

For Alternatives A B, and C, the typical section description starts at Cypress Estate Drive/Swamp Creek Drive. South of this point the Initial Alternative which consists of the widening of SR 54 from the existing two lane facility to an urban four lane section (12-foot lanes) with a 24 foot raised median, 4 foot bike lanes in each direction and 16-foot shoulders would be implemented. The widening would begin just north of McDonough Road in Fayette County.

2. SR 54 Existing Alignment Avoidance Alternative. –"A"

Avoidance Alternative A would completely avoid the Mundy House. It would begin at the intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. It would continue north along the existing alignment, widening to the west to include four 12-foot lanes, 4-foot bike lanes, 11-foot shoulders with 5-foot sidewalk and a 24-foot raised median. At Fieldgreen Drive the roadway would taper to a 4-foot raised median and 10-foot shoulders and the bike lanes would end. Gravity or keyed retaining walls

would be used in front of the Mundy and Wallace historic resources to reduce the cut and fill limits to approximately the back-of-wall. This allows the roadway to fit within the existing 80-foot of ROW. Earthwork and a slope easement to tie in the driveway would be required. This driveway impact is expected to be minimal. After intersecting Towngate Boulevard the roadway would continue on new location until ending at the existing signalized intersection with US 41.

The Shiloh Baptist Church across the street from the Mundy House and the nearby subdivisions to the north and south would be limited to right in/right out access/egress because the 4-foot median is not wide enough for a turn lane. This alternative would not support Clayton County's bike plan because of the termination of bike lanes at Fieldgreen Drive. The combination of a narrow median and termination of the bike lanes would not allow for safety maximization in the designed roadway should this alternative be selected (see Figure 31). In the area of the Mundy House, this alternative severely restricts access to the roadway, and though it provides for smoother traffic flow by eliminating potential conflict points associated with turning movements in this immediate area, this comes at the expense of requiring numerous local residents to execute right-turn/U-turn movements for any navigation that requires a left turn.

This alternative would require a GDOT design variance to allow a median break less than 660 feet from the US 41/SR 54 intersection. This is inherently unsafe for motorists along the roadway. The functional area of an intersection is the area that is critical to its function (see Figure 29 below). This is the area where motorists are responding to the intersection, decelerating, and maneuvering into the appropriate lane to stop or complete a turn. Access connections too close toan intersection can cause serious traffic conflicts that impair the function of the affected facilities. Drivers make more mistakes and are more likely to have collisions when they are presented with complex driving situations created by numerous conflicts. Conversely, simplifying the driving task contributes to improved traffic operations and fewer collisions. Drivers need sufficient time to address one potential set of conflicts before facing another. The necessary spacing between conflict areas increases as travel speed increases, to provide drivers adequate perception

and reaction time. Separating conflict areas helps to simplify the driving task and contributes to improved traffic operations and safety.

As this alternative would only allow the roadway to fit within the existing 80-foot of ROW, there will be no room for the creation of separate turn lanes which allow drivers to gradually decelerate out of the through lane and wait in a protected area for an opportunity to complete a turn, thereby reducing the severity and duration of conflict between turning vehicles and through traffic.

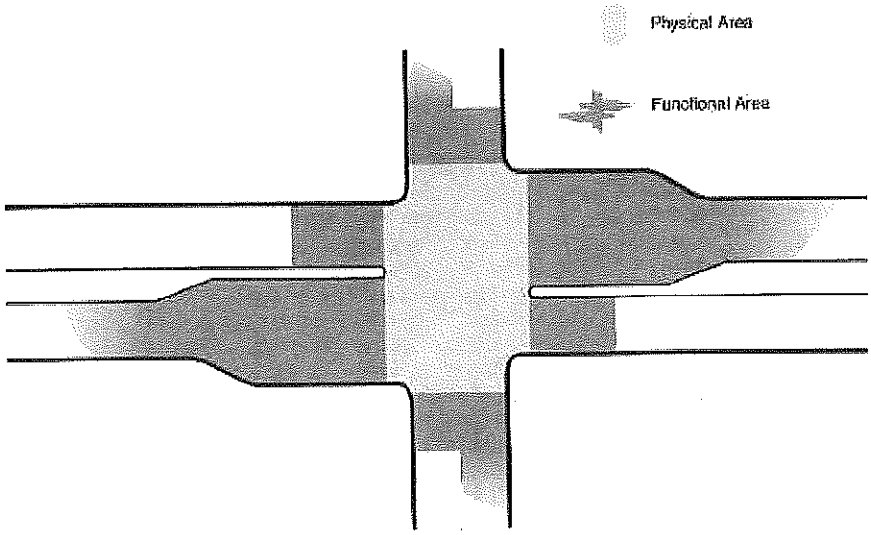


Figure 29: Functional Intersection Area

Alternative "A" would result in four residential displacements in addition to the eight that would be displaced south of this section. (from just north of McDonough Road to Cypress Estates Drive) As this alternative would create safety hazards in addressing the need for capacity along the project corridor, it was not considered a feasible alternative.

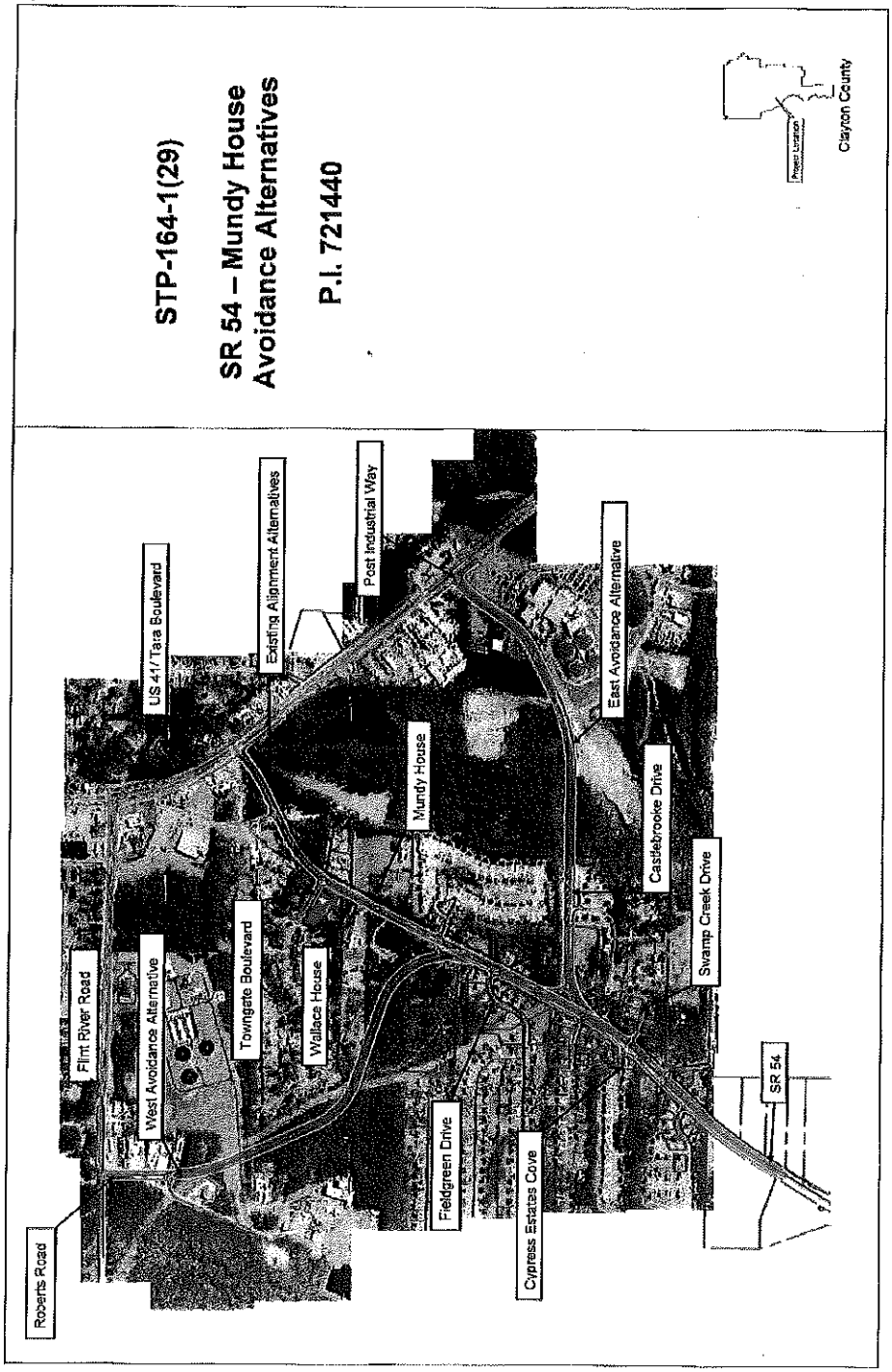


Figure 30 – Avoidance Alternatives Map

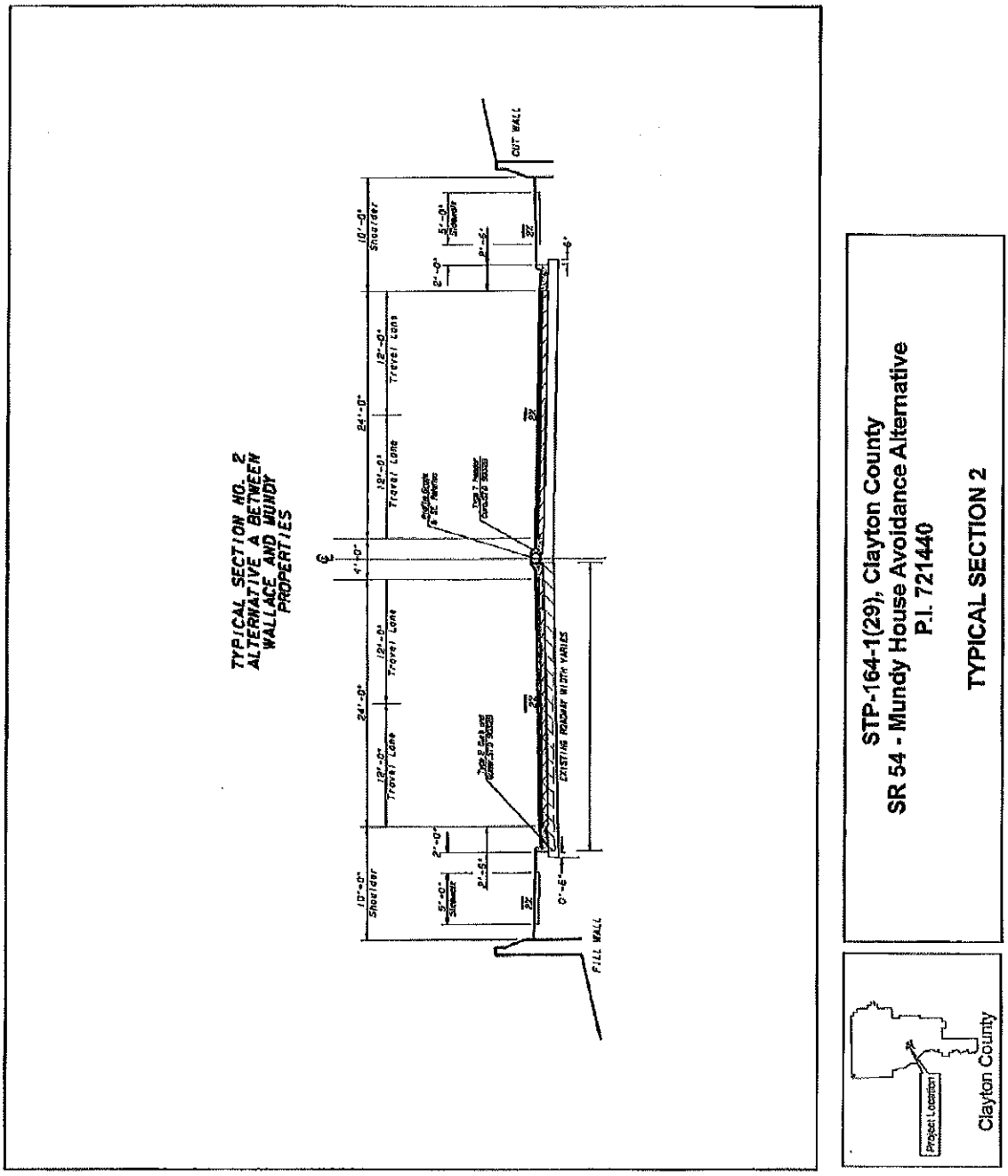


Figure 31 – Typical Section for Avoidance Alternative 'A'

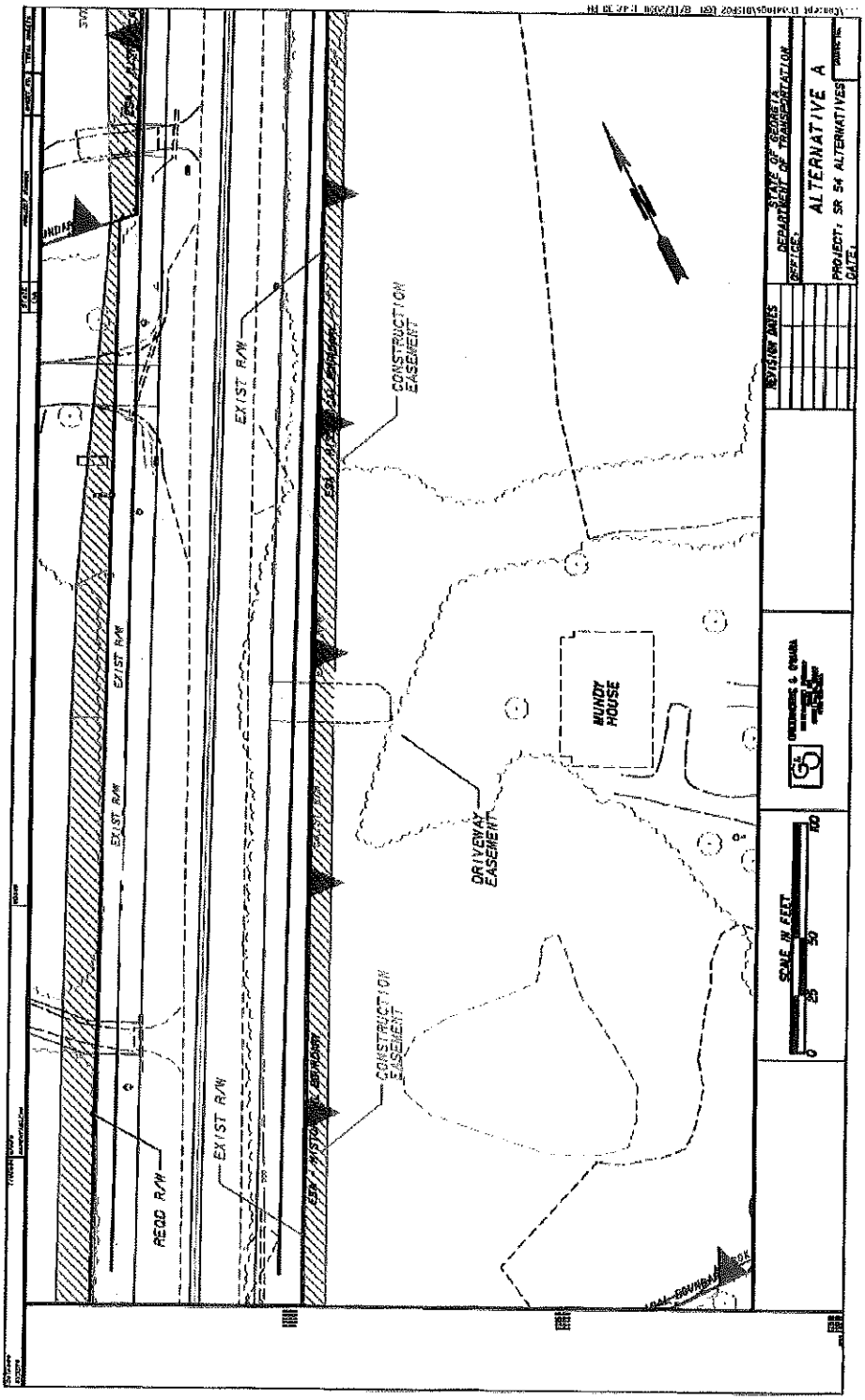


Figure 32a – Mundy House Site Impact for Alternative 'A' (1)

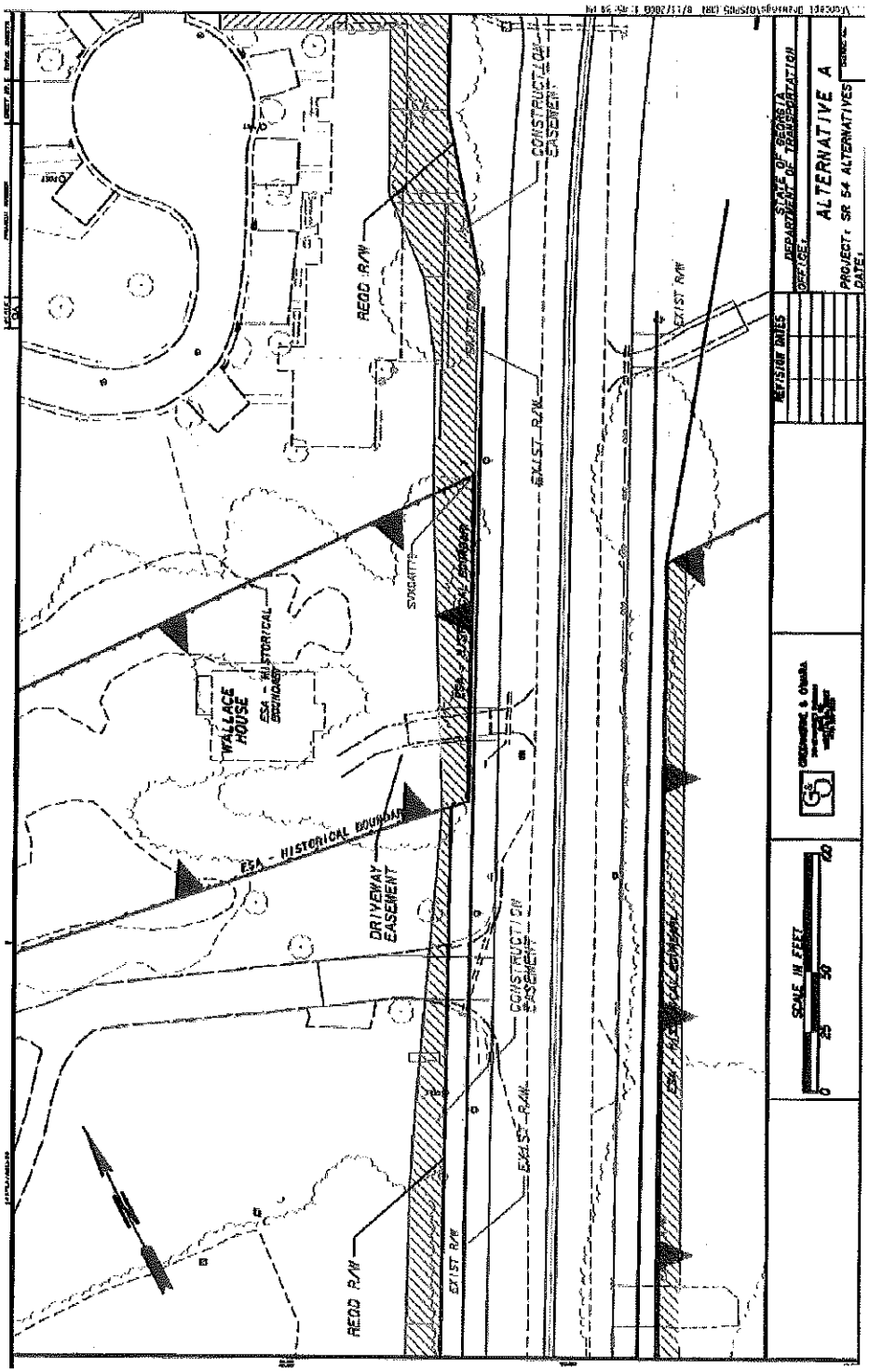


Figure 32b - Mundy House Site Impact for Alternative 'A' (2)

3. East Avoidance Alternative –"B"

The East Avoidance Alternative would completely avoid the Mundy House. This alternative begins at the intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. The typical section would consist of four 12-foot lanes, 4-foot bike lanes, 16-foot shoulders with 5-foot sidewalk and a 24-foot raised median. The alignment would turn right onto new alignment approximately 550 feet north of Cypress Estates Drive. The roadway would cross an existing subdivision and tie-ins would be constructed with SR 54 and Castlebrooke Drive. The alignment would cross two streams—one intermittent and one ephemeral—before traversing an abandoned airfield and turning northeast, passing between the Clayton County Courthouse and another existing building. Access would be provided to the Clayton County Judicial Complex and the Clayton County Aquatic Center. The roadway would tie into US 41 at the existing signalized entrance to the Judicial Complex. The typical section would remain unchanged from the original design. A windshield survey did not identify any historic resources along the proposed alignment. The East Alternative would cross two drainages. There are no wetlands near the project. The East Alternative would displace approximately nine residences. This is in addition to the eight potential displacements that are expected from the western terminus of the project just north of McDonough Road to Cypress Estate Drive/Swamp Creek Drive. Capacity analysis was conducted at the projected intersection of SR 54 with US 41. This analysis took into account the projected hourly turning volumes during the build and design years. The SR 54/US 41 intersection would be at LOS E during the AM peak hour and LOS D during the PM peak hour in the build year. By 2033, all peak periods would be at LOS F.

The East Alternative was not considered a feasible alternative because of its failure to address the capacity deficiency.

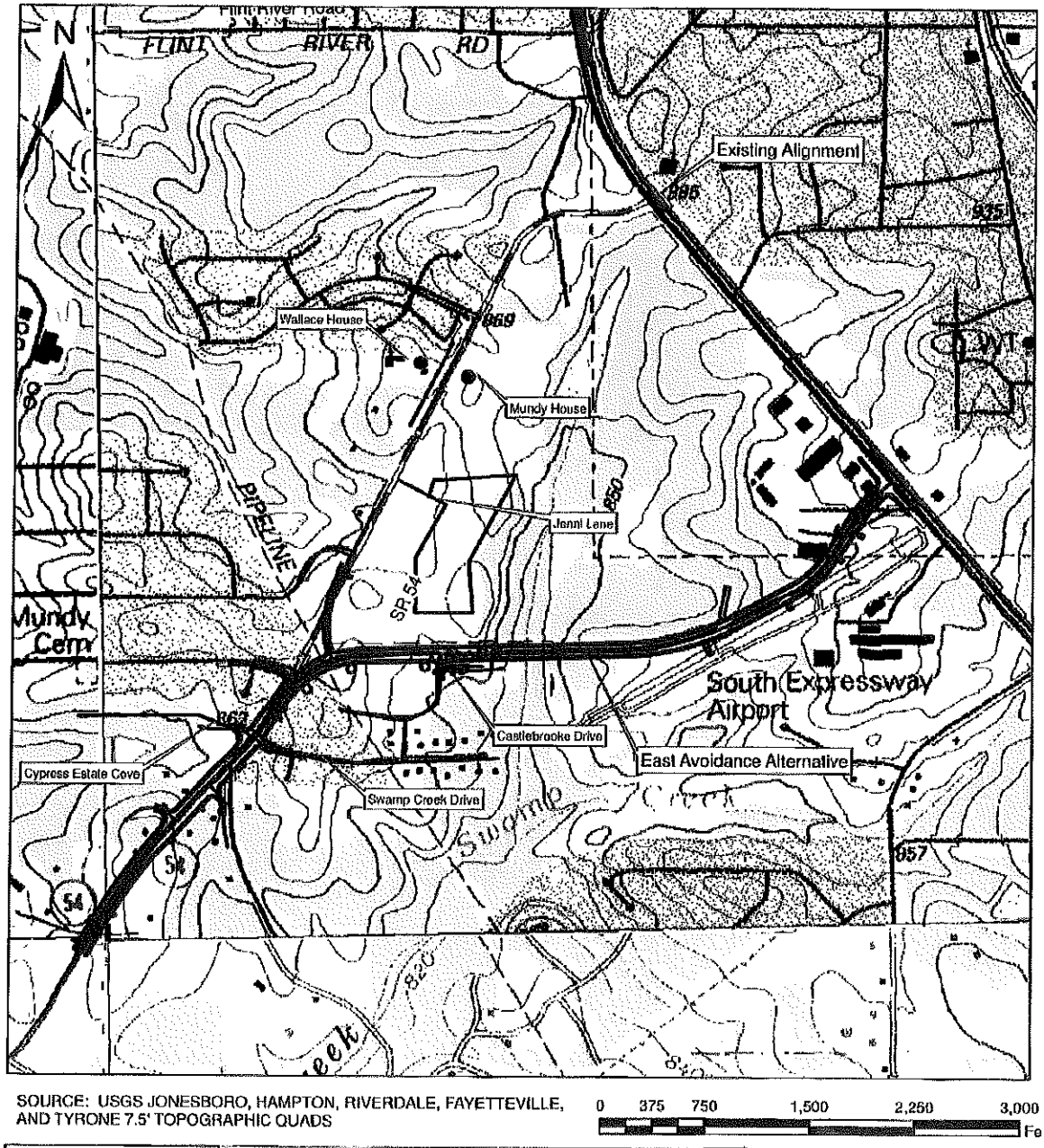


Figure 33 – East Avoidance Alternative 'B'

4. West Avoidance Alternative –"C"

The West Alternative begins at the Intersection of SR 54 with Cypress Estates Drive/Swamp Creek Drive. The typical section is the same as the East Avoidance Alternative. The typical section would consist of four 12-foot lanes, 4-foot bike lanes, 16-foot shoulders with 5-foot sidewalk and a 24-foot raised median. The alignment would follow existing SR 54 until it intersects Fieldgreen Drive, then would turn northwest on new alignment and crosses an Atlanta Gas Light pipeline easement. The roadway would turn further northward to parallel the easement. The alignment then turns directly north to avoid a fire station and would cross the gas pipeline again. It then crosses Roberts Road shortly before ending at Flint River Road.

A tie in to Roberts Road would be constructed to provide access for emergency vehicles. A signal would be installed at the proposed intersection with Flint River Road. The alternative would require two commercial and one residential displacement in addition to the eight that would be displaced from the western terminus of the project to Cypress Estates Drive. This alternative would add length to the SR 54 alignment. (Fig. 34)

Northbound traffic would turn right on Flint River Road to continue on SR 54 then turn north on US 41. The addition of SR 54 traffic onto Flint River Road would have serious consequences for the new intersection. The new intersection would be at LOS F during both the AM and PM peak hours immediately after construction. Construction on Flint River Road would be required to mitigate this impact. Delays caused by the West Avoidance Alternative are higher than those caused by any of the Alternatives that intersect US 41.

In addition to not addressing capacity issues because of a LOS of "F" in the build year (2013), the West avoidance alternative was not considered a feasible alternative because of the cost associated with the gas pipeline crossings and the length of new alignment.

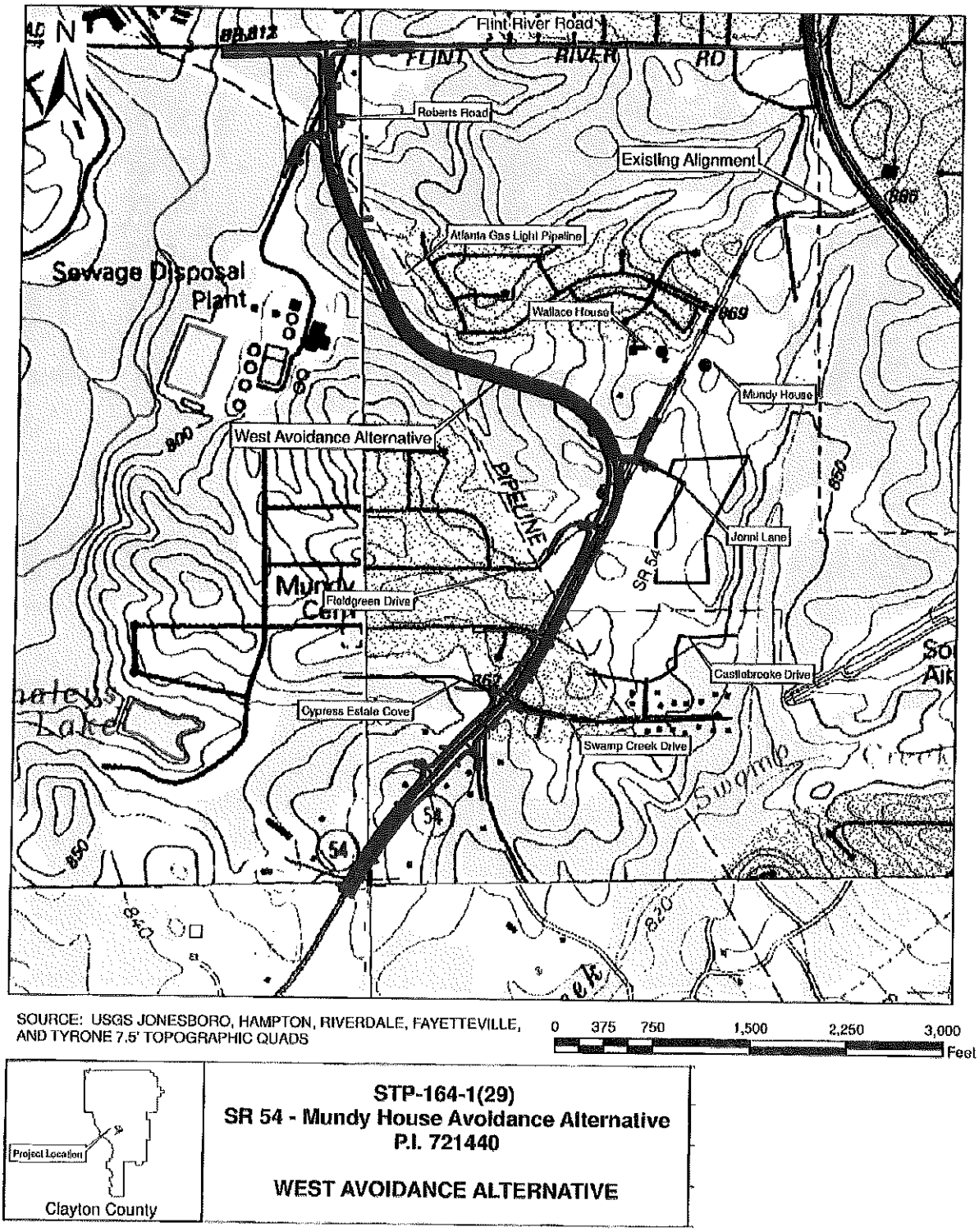


Figure 34 – West Avoidance Alternative 'C'

Minimization Alternatives

Since total avoidance of the Mundy House was not a feasible alternative, a technical assistance meeting was held on the site with FHWA, SHPO, Georgia DOT, Arcadis (designer), and Greenhorne & O'Mara, Inc. (consultant) on July 8, 2008 to consider impact minimization efforts to the Mundy House, if any.

The minimization alternative would have 4-11 foot lanes, 4-foot bike lanes, 5-foot sidewalks, a 14-foot flush median and a wall. The wall would minimize the impact on the Mundy House property and would also define the resource. Originally, the proposed project would have reduced the setback of the Mundy House by almost half, moving the proposed edge of pavement to approximately 50 feet of the façade, greatly reducing the desirability of this house to return to its historic use. Even though the Mundy House is currently vacant and the property has been zoned for low density residential development, the efforts to minimize harm to the resource have resulted in preserving more of the setback than what was originally proposed. Based on deliberations and discussions at this meeting, the edge of pavement would only be move approximately 30 feet closer to the structure and the amount of required ROW was reduced from 60 - 68 feet to the proposed 18 feet. This alternative would acquire 0.18 acre of ROW from the resource.

At this meeting SHPO stated their preference and support for the minimization alternative. The proposed ROW for the Initial Alternative and the Minimization Alternative were flagged so meeting attendees could see the actual impact to the property. SHPO representatives stated the proposed wall would be a benefit as it would define the resource as well as minimize impact. SHPO representatives also stated their support for the Minimization Alternative because the Mundy House would continue to exist as a historic resource, have the potential to return to its residential use while retaining its defining characteristics and meeting the project's need and purpose. Representatives of the SHPO concluded that the Minimization Alternative was preferable to displacing ten residences as the East Avoidance Alternative ("B") would.

The minimization alternative decided upon at this technical assistance meeting is described in more detail below. The minimization alternative has now been adopted as the Preferred Alternative (see II. B – Description of Alternatives, Build Alternative on page 16)

Table 12 – Alternatives Impact Summary

All impacts presented here are those from Cypress Estates Drive north to the northern project terminus (US 41 or Flint River Road, depending on the Alternative). No impacts from McDonough Road to Cypress Estates Drive are included as they are not relevant to the Alternatives impact comparison.

		"A"	"B"	"C"	"D"	"E"
Parameter		Avoidance Alternative	East Avoidance Alternative	West Avoidance Alternative	Minimization Alternative	Initial Alternative
Length (mi.)		0.94	1.0	1.21	0.94	0.94
Cost ($1,000)		6,200	9,091	10,257	6,407	7,018
Waters of the U.S.		No	Yes	No	No	No
Cultural Resources		Yes	No	No	Yes	Yes
AM LOS	2013	B	E	F	B	B
	2033	C	F	F	C	C
PM LOS	2013	B	F	F	B	B
	2033	C	F	F	C	C
Displacements		4 Residential	10 Residential	2 Commercial 4 Residential	4 Residential	4 Residential
Required ROW (ac.)		8.7	16	18.6	9.2	8.9
Parcels		31	33	31	32	37
Speed design (mph)		45	45	45	45	45
Potential Safety Hazards		Yes	No	No	No	No
Meet Need & Purpose		Yes	No	No	Yes	Yes

3. Minimization Alternative – "D" – Preferred Alternative

The minimization alternative would have 4-11 foot lanes, 4-foot bike lanes and 5-foot sidewalk, a 14-foot flush median, and a wall in the area of the Mundy House (approximate station numbers 263+00 to 267+50). The wall would minimize the impact on the Mundy House property and would also define the resource. This alternative would acquire 0.18 acre of ROW from the resource. The driveway easement would extend further into the property. This alternative would have identical traffic capacity as the

Avoidance Alternative ("A") and the Initial Alternative ("E). There would be four residential displacements in addition to the eight from just north of McDonough to Cypress Estates Drive.

This alternative would allow the Mundy House to retain its defining characteristics while meeting the project need and purpose. The Mundy House would be available for possible renovation as a historic resource. This Alternative fits within the horizontal limits presented by two 4(f) resources on opposite sides of a roadway. Although a flush median does not separate traffic as a raised median does, the roadway would still be in keeping with design standards while meeting the project's need and purpose.

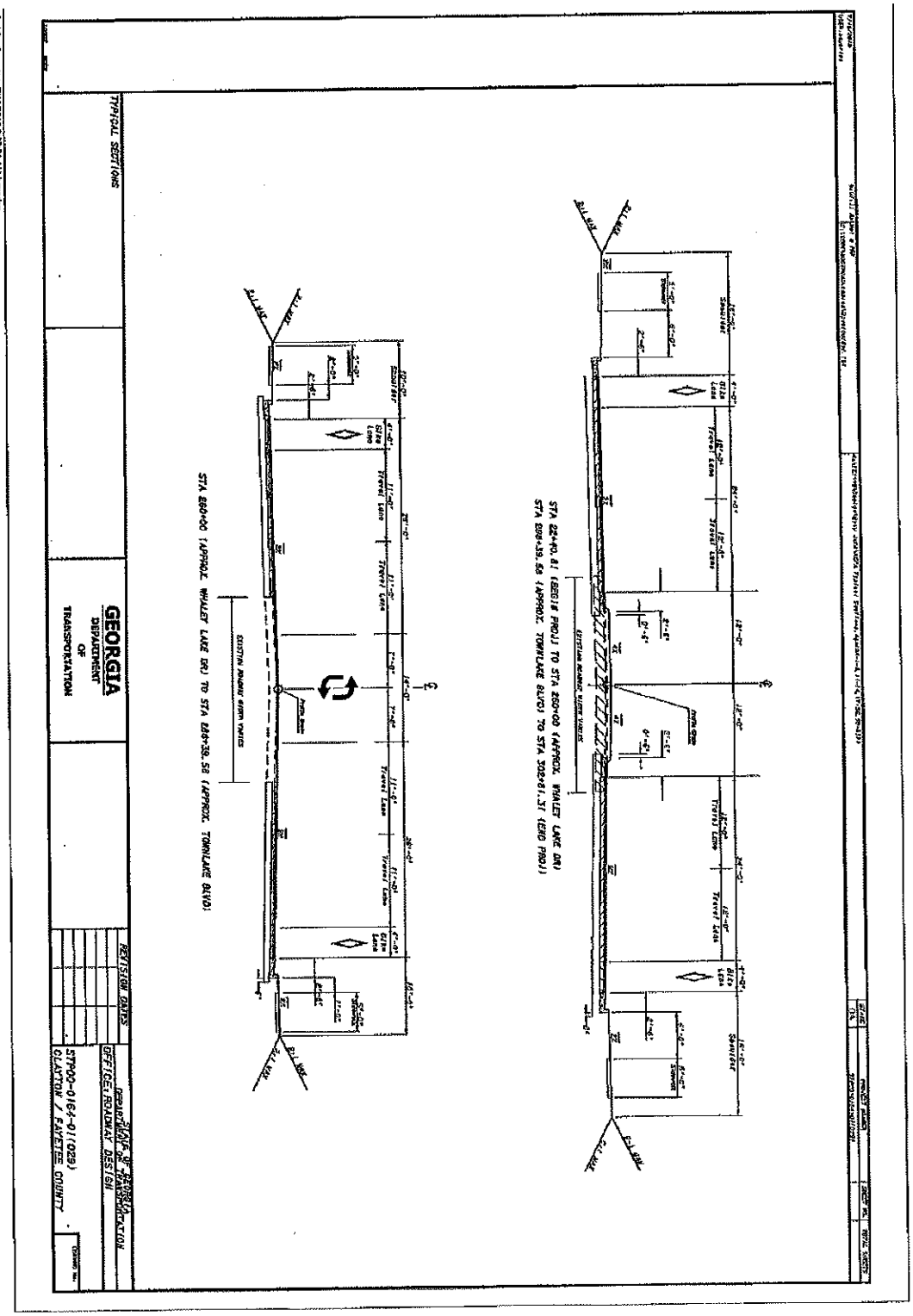


Figure 35 – Typical Sections by Station Numbers

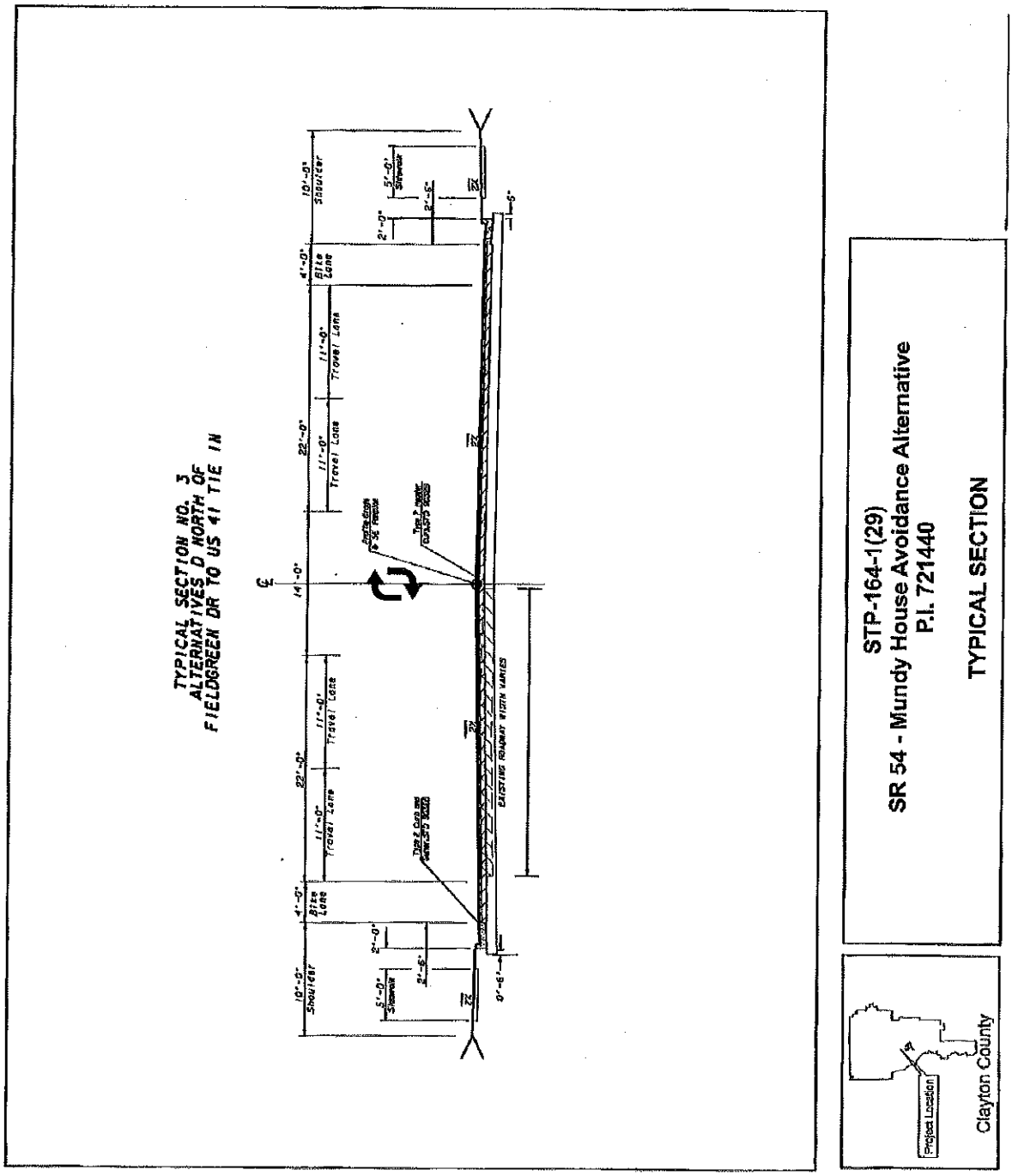


Figure 36 – Typical Section of Minimization Alternative 'D'

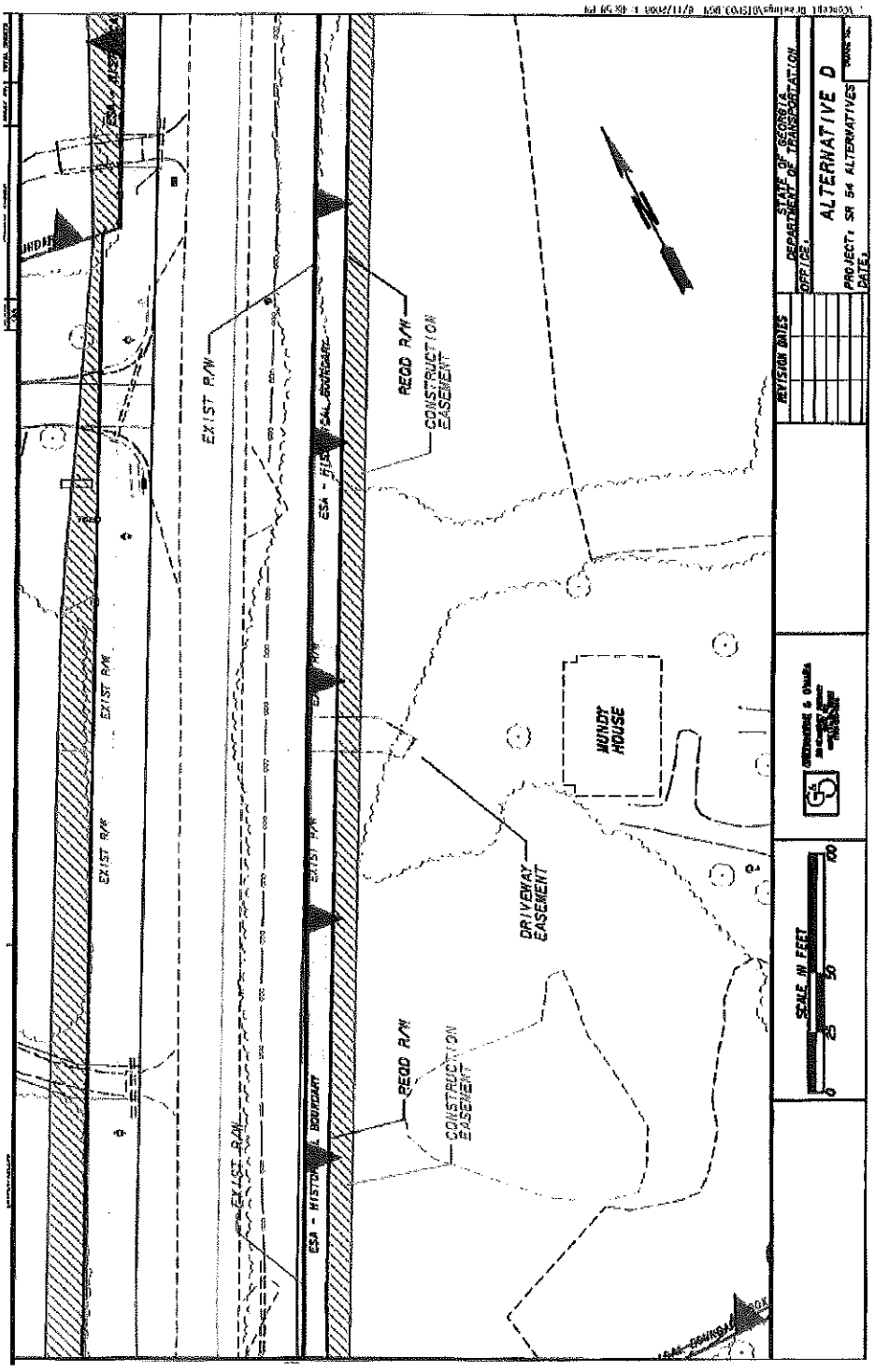


Figure 37a – Mundy House Site Impact for Minimization Alternative 'D' (1)

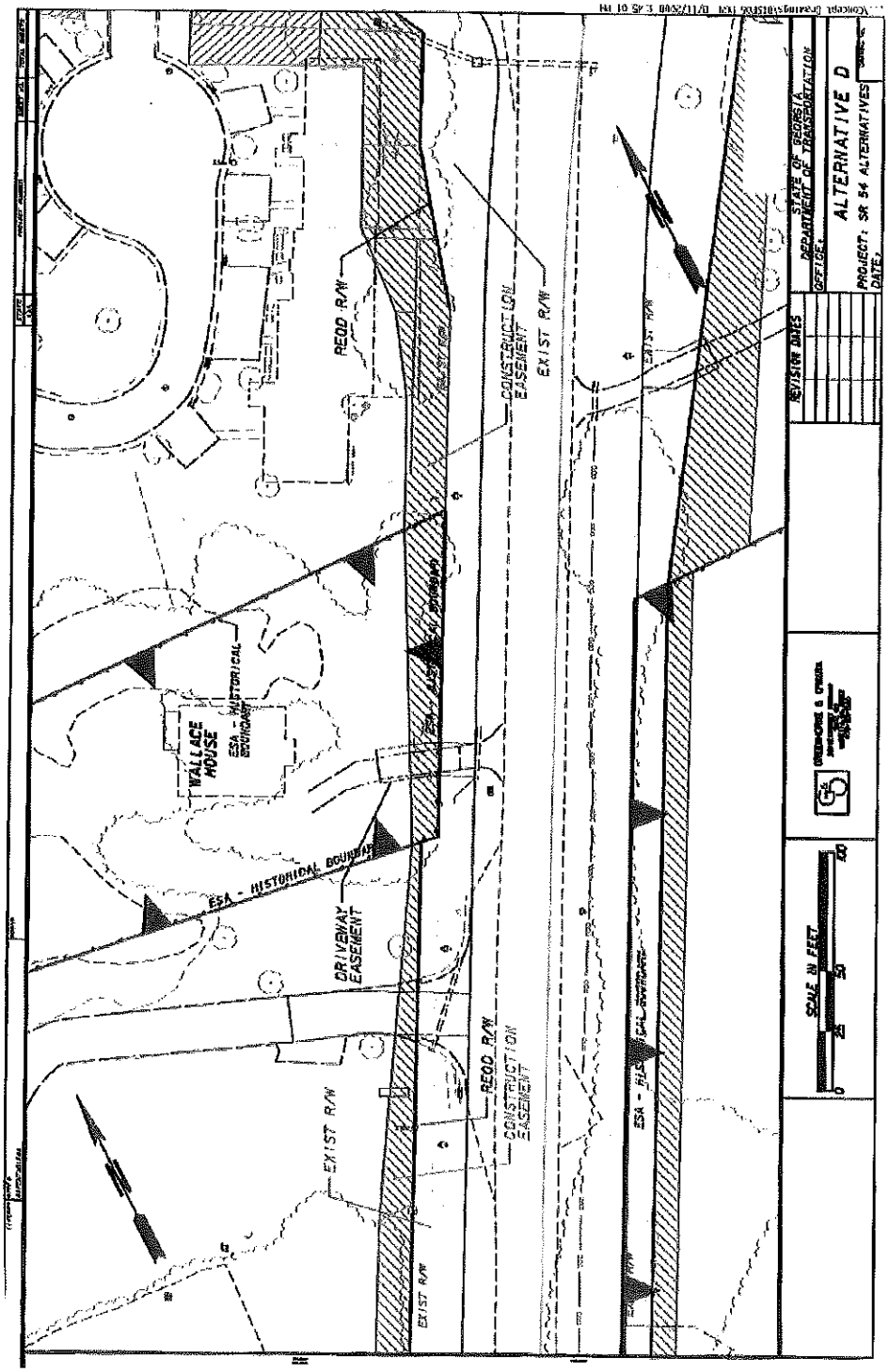


Figure 37b – Mundy House Site Impact for Minimization Alternative 'D' (2)

PLANNING TO MINIMIZE HARM AND PROPOSED MITIGATION

Planning to minimize harm was taken into consideration to the extent possible during project development. A total avoidance of the Mundy House was considered but not adopted because of the resultant effects previously discussed. Alternative "A" in the Section 4(f) discussion (page 157) would create unsafe driving conditions although totally avoiding the Mundy House. Also, as the adverse effects to the Mundy House results from the loss of several contributing features, one of which is the vegetation that borders the existing ROW and currently screens the house from the existing roadway, even a reduction from the 18 feet of ROW now required from the Mundy House would still potentially result in an adverse effect to the resource. The driveway to the property extends in an uphill direction, following SR 54 in a parallel manner. In order to correct the current skewed intersection of the driveway and SR 54, the driveway would be relocated towards the center of the domestic yard and would intersect SR 54 at a 90-degree angle. This loss of the historic entrance to the property is also an adverse effect to the Mundy House. The only way to completely avoid an adverse effect to the Mundy House will be to hold the existing ROW.

In the area of the Gilbert Farm and the Blalock House, the project as currently designed minimizes harm to the resources. An alternative alignment was selected along the Mundy House in order to minimize the impacts while ensuring the Wallace House would not be adversely affected. The original alignment proposed 60 to 68 feet of required ROW from within the boundary of the Mundy House and reducing the setback of the house by half. As a result of the Minimization Alternative, the amount of required ROW and setback has been reduced.

In spite of the minimization effects, the Mundy House would still be adversely affected by the proposed project. As such, the following mitigation measures are proposed for discussion at consultation between the FHWA and the SHPO:

1. The FHWA would ensure that an historical narrative detailing the history of the Mundy House and the association of the Mundy family to nearby landmarks, such as Mundy Mill Road would be prepared. The documentation would be submitted to the Georgia SHPO for acceptance and retention, and would also be provided to local libraries and historical societies for their repositories.

2. Prior to project implementation, FHWA would ensure that the setting within and outside the eligible NRHP boundary of the Mundy House would be documented with medium format photography. The documentation would be prepared per the guidelines set forth in the GDOT and Georgia SHPO's Guidelines for Establishing a Permanent Archival Record. The documentation would be submitted to the Georgia SHPO for acceptance and retention.

3. Prior to project implementation, FHWA would ensure that the property owner of the Mundy House is contacted and afforded the opportunity to have a landscape plan developed on his/her property. The landscape plan would consist of a landscape treatment utilizing native vegetation in order to create a buffer between the Mundy House and the improved roadway. The plan developed between the property owner and GDOT would be submitted to the Georgia SHPO for review and concurrence.

V. COORDINATION AND COMMENTS

During the early project development, a number of agencies, including local governments and local planning agencies, were contacted and asked for their comments on the proposed action. Copies of comments received from the responding agencies would be included in the subsequent environmental document.

The Georgia Department of Transportation would advertise the availability of this environmental assessment and would hold a public hearing. Any comments concerning this environmental assessment should be addressed to the following:

Mr. Glenn Bowman, P.E.
State Environmental Administrator
Georgia Department of Transportation
600 West Peachtree Street
16th Floor
Atlanta, GA 30308

or

Mr. Rodney N. Barry, P.E.
Division Administrator
Federal Highway Administration
Atlanta Federal Center
61 Forsyth Street, S.W.
Suite 17 T100
Atlanta, GA 30303-3104

After review of comments received during the comment period, a decision would be made by the responsible officials concerning which alternative would be selected.

References (*Report on file with the Georgia Department of Transportation):

- Clayton County Comprehensive Plan: http://www.co.clayton.ga.us/pdfs/community_development/comp_plan_2005-2025.pdf
- Fayette County Comprehensive Plan: http://www.fayettecountyga.gov/planning_and_zoning/growth_management_plan.htm
- Highway Transportation Manual: http://www.trb.org/Main/Blurbs/Highway_Capacity_Manual_2000_152169.aspx
- Access Management Manual, Transportation Research Board, 2003: www.accessmanagement.gov
- US Census Bureau: http://www.census.gov/
- California Department of Transportation: http://www.dot.ca.gov/ser/vol1/sec3/special/ch17flood/chap17.htm#minimal
- GDOT traffic data*
- Air & Noise Report*
- Archaeology Report*
- Ecology Report*
- History Report and Assessment of Effects*
- Accident Data*
- Ms. Beverly Ramsey, Clayton County Planning & Zoning Dept. 770-473-3835/ 678-776-6710
- Mr. Tom Williams, Assistant Director, Fayette County Planning and Zoning. 770-460-5730 x5163. twilliams@fayettecountyga.gov